



## wwPDB EM Validation Summary Report ⓘ

Nov 14, 2022 – 01:54 PM JST

PDB ID : 6J2C  
EMDB ID : EMD-9769  
Title : Yeast proteasome in translocation competent state (C3-a)  
Authors : Cong, Y.  
Deposited on : 2019-01-01  
Resolution : 7.00 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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 ⓘ symbol.

The types of validation reports are described at

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

---

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

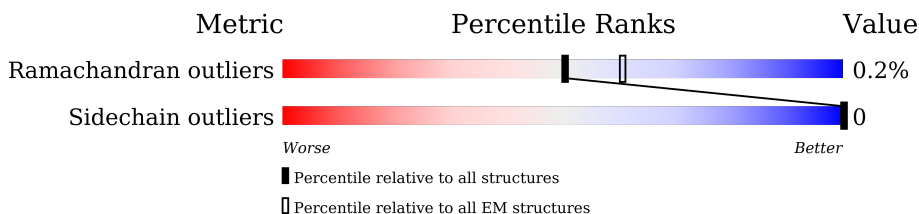
EMDB validation analysis : 0.0.1.dev43  
MolProbity : 4.02b-467  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.31.2

# 1 Overall quality at a glance

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

The reported resolution of this entry is 7.00 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion  $< 40\%$ ). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1	215	
1	b	215	
2	2	261	
2	i	261	
3	3	205	
3	h	205	
4	4	198	
4	g	198	
5	5	287	

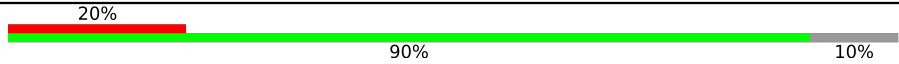
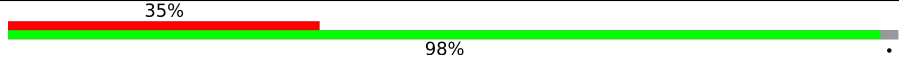
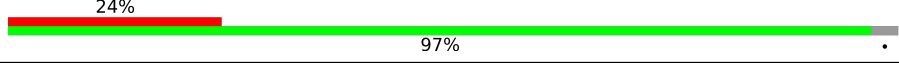
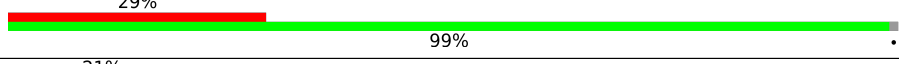
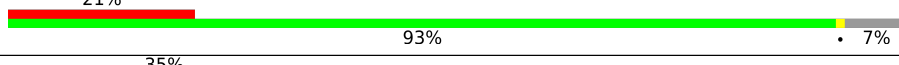
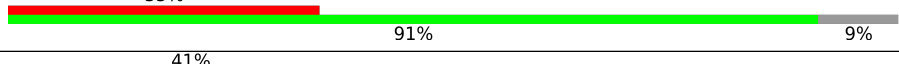
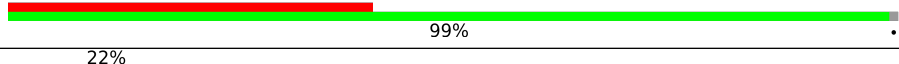

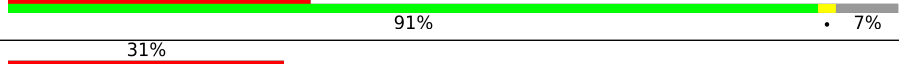


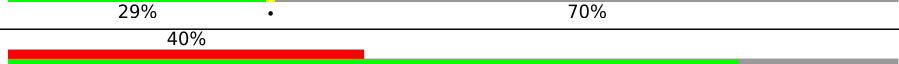

*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	f	287	9% 74% 26%
6	6	241	10% 92% 8%
6	e	241	10% 92% 8%
7	7	266	9% 86% 14%
7	a	266	12% 87% 13%
8	A	252	19% 96% •
8	c	252	19% 96% •
9	B	250	19% 100%
9	j	250	23% 100%
10	C	258	17% 95% 5%
10	d	258	21% 95% 5%
11	D	254	11% 94% 6%
11	n	254	14% 95% 5%
12	E	260	15% 93% 7%
12	m	260	16% 93% 7%
13	F	234	15% 100%
13	l	234	20% 100%
14	G	288	14% 84% 16%
14	k	288	15% 85% 15%
15	H	467	34% 77% 23%
16	I	437	34% 83% 17%
17	J	405	42% 92% 8%
18	K	428	32% 89% 11%
19	L	437	35% 83% 17%
20	M	434	36% 84% • 15%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
21	N	945	
22	O	393	
23	P	445	
24	Q	434	
25	R	429	
26	S	523	
27	T	274	
28	U	338	
29	V	306	
30	W	268	
31	X	156	
32	Y	89	
33	Z	993	

## 2 Entry composition [i](#)

There are 33 unique types of molecules in this entry. The entry contains 106149 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 Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	1	196	1512	955	250	300	7	0	0
1	b	196	1512	955	250	300	7	0	0

- Molecule 2 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	2	226	1719	1082	298	332	7	0	0
2	i	226	1719	1082	298	332	7	0	0

- Molecule 3 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	3	204	1581	1010	258	305	8	0	0
3	h	204	1581	1010	258	305	8	0	0

- Molecule 4 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	4	195	1561	992	264	299	6	0	0
4	g	195	1561	992	264	299	6	0	0

- Molecule 5 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	5	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		
5	f	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		

- Molecule 6 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	6	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		
6	e	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		

- Molecule 7 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	7	229	Total	C	N	O	S	0	0
			1790	1133	306	344	7		
7	a	232	Total	C	N	O	S	0	0
			1815	1148	311	349	7		

- Molecule 8 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	A	241	Total	C	N	O	S	0	0
			1907	1214	320	365	8		
8	c	243	Total	C	N	O	S	0	0
			1921	1221	322	370	8		

- Molecule 9 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	B	250	Total	C	N	O	S	0	0
			1915	1219	315	377	4		
9	j	250	Total	C	N	O	S	0	0
			1915	1219	315	377	4		

- Molecule 10 is a protein called Proteasome subunit alpha type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	C	244	Total	C	N	O	S	0	0
			1904	1201	321	379	3		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf	Trace
10	d	244	Total	C	N	O	S	0	0
			1904	1201	321	379	3		

- Molecule 11 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	D	240	Total	C	N	O	S	0	0
			1881	1176	329	372	4		
11	n	241	Total	C	N	O	S	0	0
			1890	1181	331	374	4		

- Molecule 12 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	E	242	Total	C	N	O	S	0	0
			1861	1162	314	378	7		
12	m	242	Total	C	N	O	S	0	0
			1861	1162	314	378	7		

- Molecule 13 is a protein called Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	F	233	Total	C	N	O	S	0	0
			1795	1129	312	350	4		
13	l	233	Total	C	N	O	S	0	0
			1795	1129	312	350	4		

- Molecule 14 is a protein called Probable proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	G	243	Total	C	N	O	S	0	0
			1892	1203	329	356	4		
14	k	244	Total	C	N	O	S	0	0
			1896	1205	330	357	4		

- Molecule 15 is a protein called 26S protease regulatory subunit 7 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	H	359	Total	C	N	O	S	0	0
			2792	1755	499	523	15		

- Molecule 16 is a protein called 26S protease regulatory subunit 4 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	I	363	2831	1779	472	565	15	0	0

- Molecule 17 is a protein called 26S protease regulatory subunit 8 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	J	373	2928	1837	527	547	17	0	0

- Molecule 18 is a protein called 26S protease regulatory subunit 6B homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	K	381	3019	1898	530	581	10	0	0

- Molecule 19 is a protein called 26S protease subunit RPT4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	L	361	2853	1798	507	536	12	0	0

- Molecule 20 is a protein called 26S protease regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	M	367	2866	1799	503	553	11	0	0

- Molecule 21 is a protein called 26S proteasome regulatory subunit RPN2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	N	849	6562	4174	1099	1261	28	0	0

- Molecule 22 is a protein called 26S proteasome regulatory subunit RPN9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	O	387	3182	2047	520	606	9	0	0

- Molecule 23 is a protein called 26S proteasome regulatory subunit RPN5.



Mol	Chain	Residues	Atoms					AltConf	Trace
23	P	432	Total	C	N	O	S	0	0
			3545	2260	592	684	9		

- Molecule 24 is a protein called 26S proteasome regulatory subunit RPN6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Q	431	Total	C	N	O	S	0	0
			3471	2205	574	676	16		

- Molecule 25 is a protein called 26S proteasome regulatory subunit RPN7.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	R	400	Total	C	N	O	S	0	0
			3218	2051	527	630	10		

- Molecule 26 is a protein called 26S proteasome regulatory subunit RPN3.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	S	475	Total	C	N	O	S	0	0
			3894	2488	653	738	15		

- Molecule 27 is a protein called 26S proteasome regulatory subunit RPN12.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	T	272	Total	C	N	O	S	0	0
			2235	1432	355	441	7		

- Molecule 28 is a protein called 26S proteasome regulatory subunit RPN8.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	U	255	Total	C	N	O	S	0	0
			2061	1312	352	391	6		

- Molecule 29 is a protein called Ubiquitin carboxyl-terminal hydrolase RPN11.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	V	284	Total	C	N	O	S	0	0
			2236	1405	381	436	14		

- Molecule 30 is a protein called 26S proteasome regulatory subunit RPN10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	W	197	1534	962	269	300	3	0	0

- Molecule 31 is a protein called 26S proteasome regulatory subunit RPN13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
31	X	111	906	586	148	169	3	0	0

- Molecule 32 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
32	Y	27	236	143	39	54	0	0

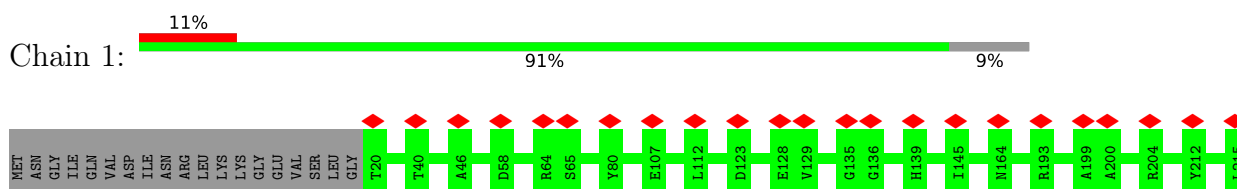
- Molecule 33 is a protein called 26S proteasome regulatory subunit RPN1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	Z	813	6290	3995	1029	1237	29	0	0

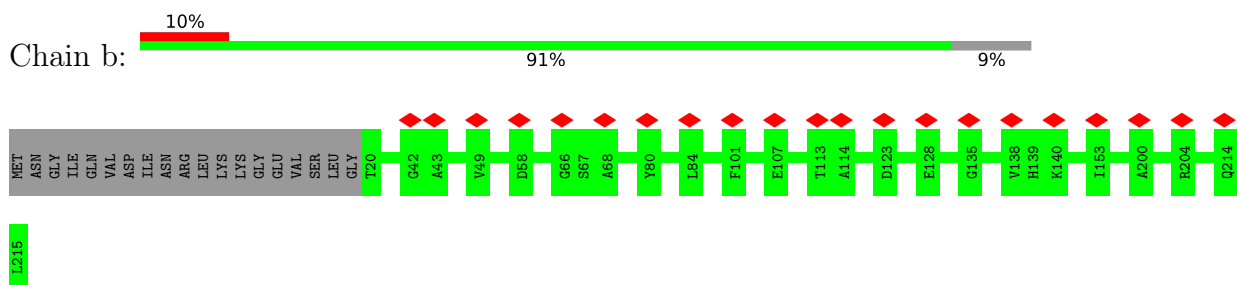
### 3 Residue-property plots [i](#)

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

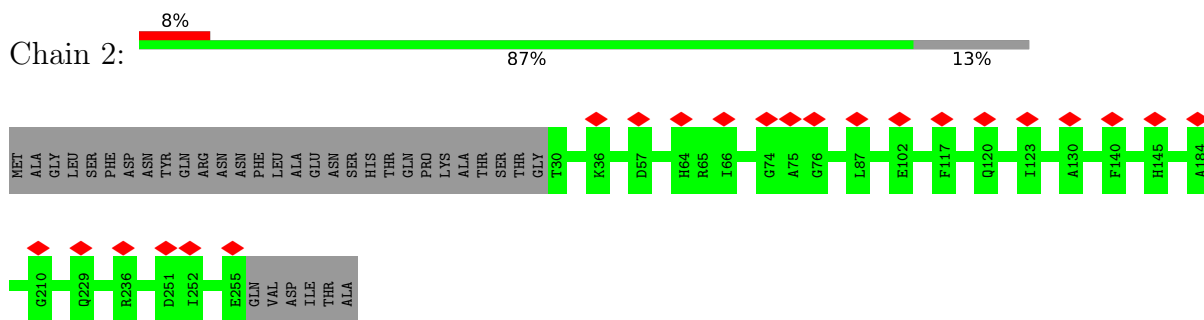
- Molecule 1: Proteasome subunit beta type-1



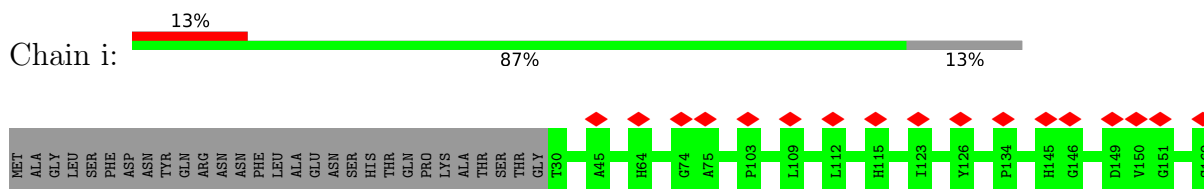
- Molecule 1: Proteasome subunit beta type-1

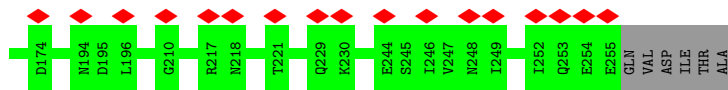


- Molecule 2: Proteasome subunit beta type-2

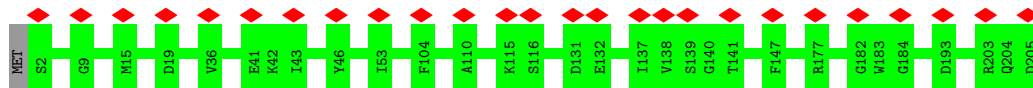


- Molecule 2: Proteasome subunit beta type-2

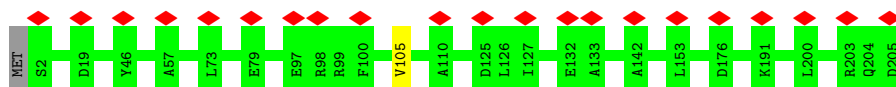




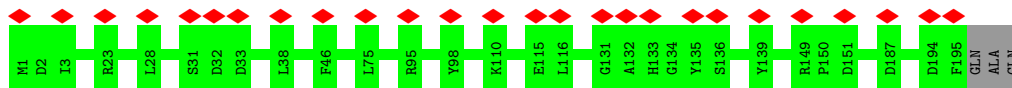
• Molecule 3: Proteasome subunit beta type-3



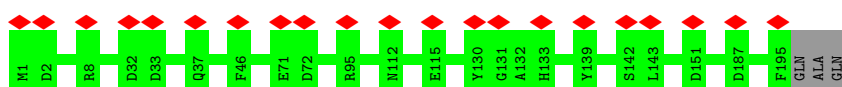
• Molecule 3: Proteasome subunit beta type-3



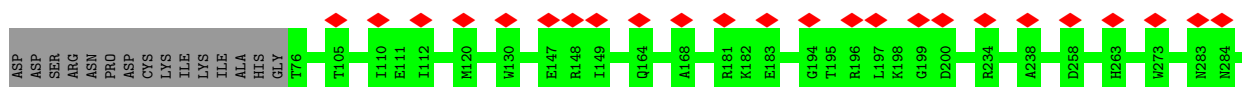
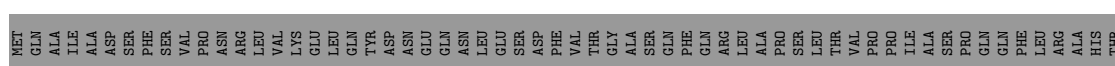
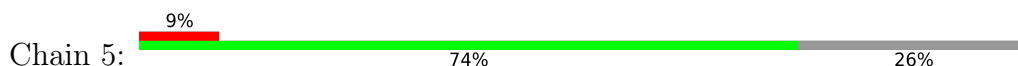
• Molecule 4: Proteasome subunit beta type-4



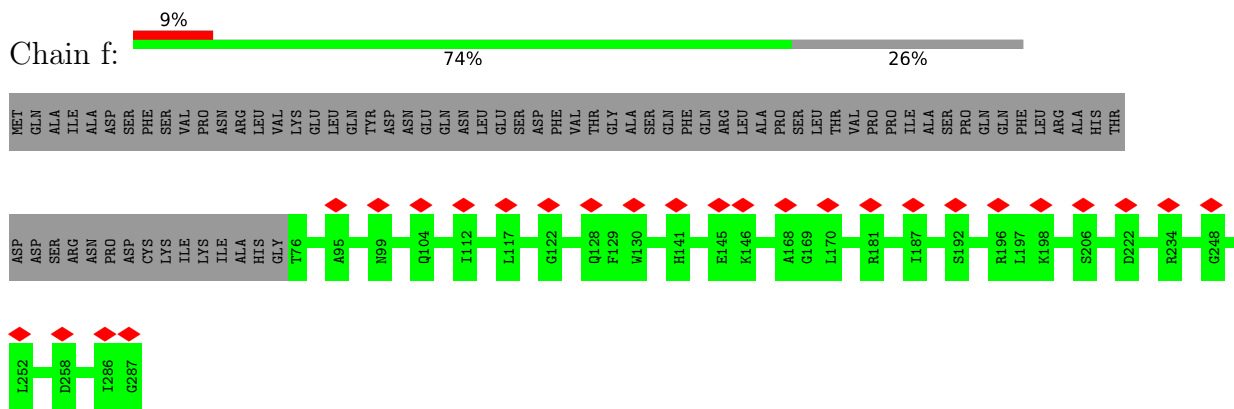
• Molecule 4: Proteasome subunit beta type-4



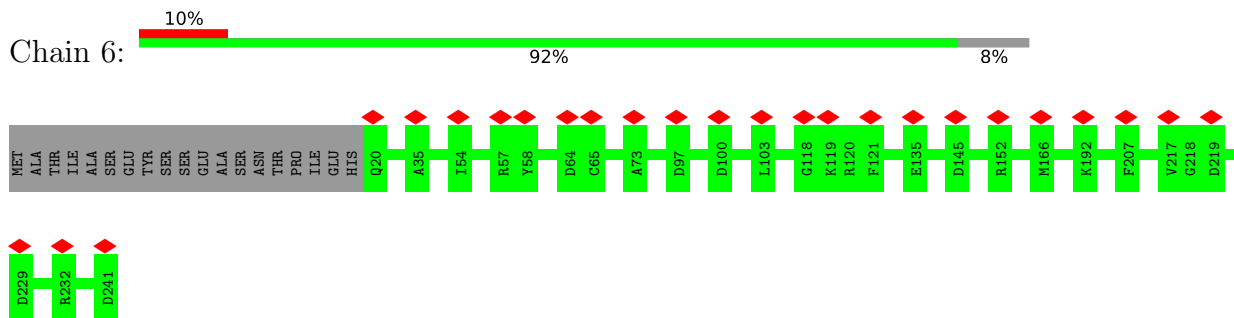
• Molecule 5: Proteasome subunit beta type-5



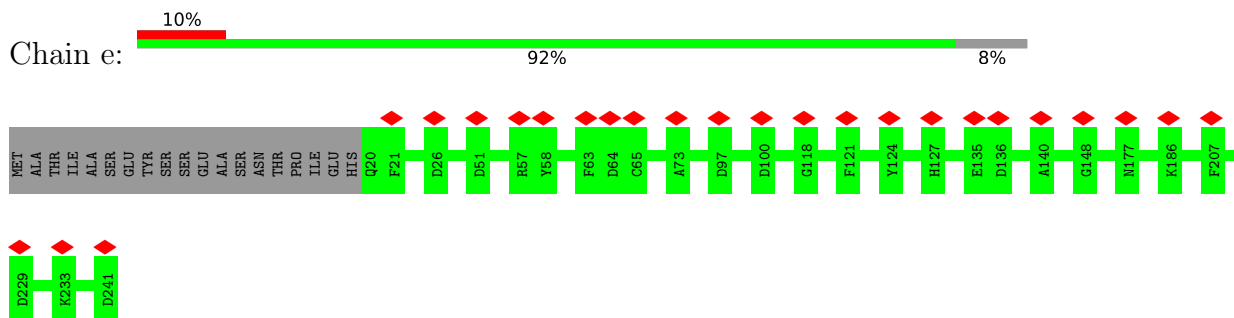
• Molecule 5: Proteasome subunit beta type-5



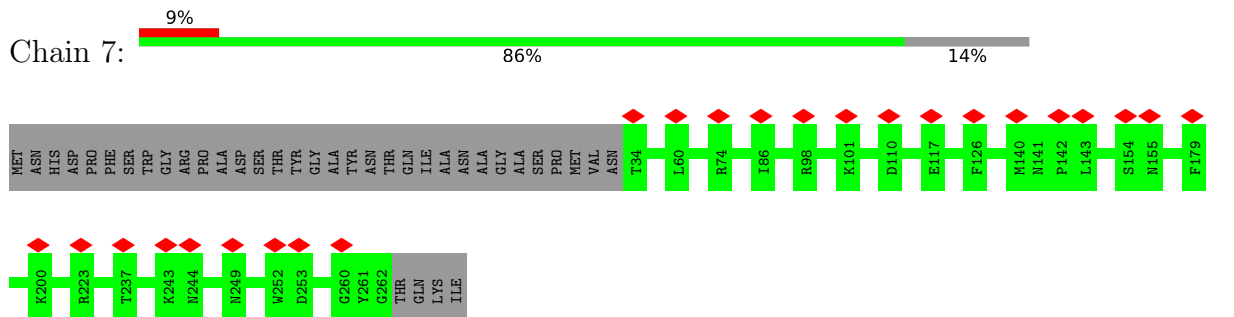
• Molecule 6: Proteasome subunit beta type-6



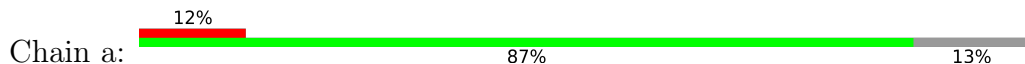
• Molecule 6: Proteasome subunit beta type-6

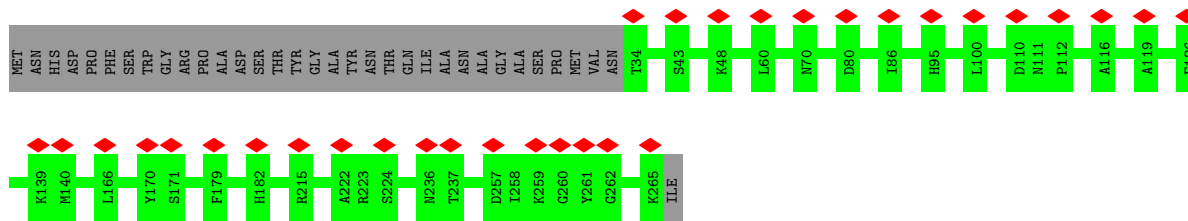


• Molecule 7: Proteasome subunit beta type-7

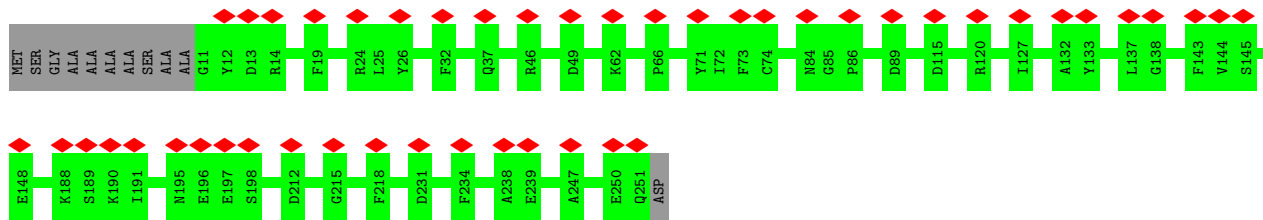


• Molecule 7: Proteasome subunit beta type-7

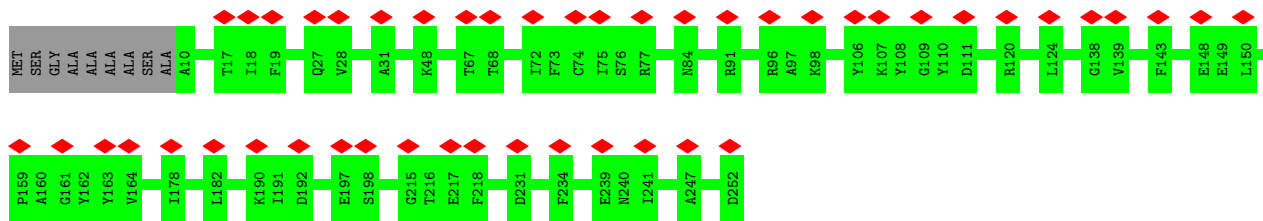




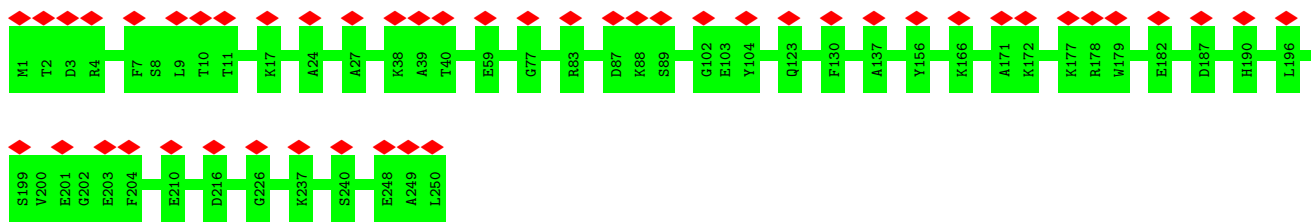
• Molecule 8: Proteasome subunit alpha type-1



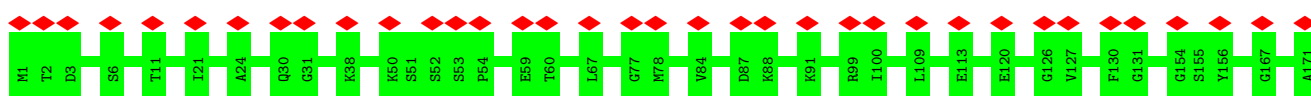
• Molecule 8: Proteasome subunit alpha type-1

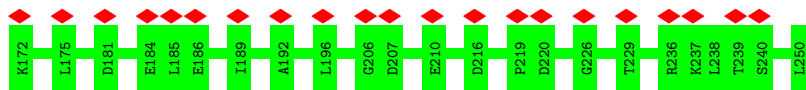


• Molecule 9: Proteasome subunit alpha type-2

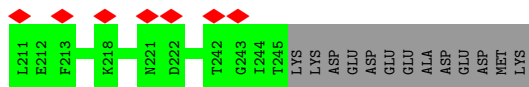
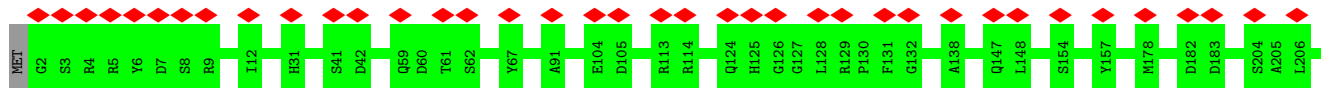
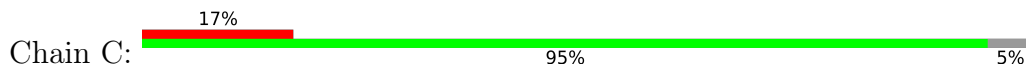


• Molecule 9: Proteasome subunit alpha type-2

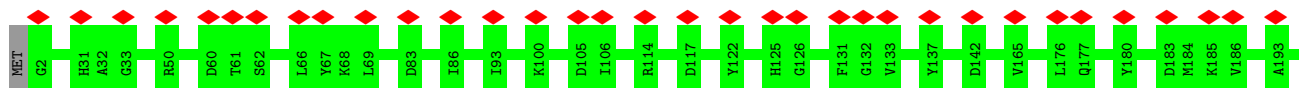
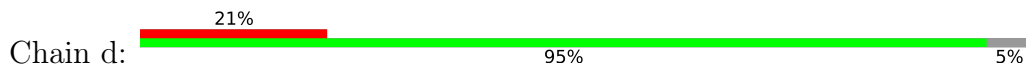




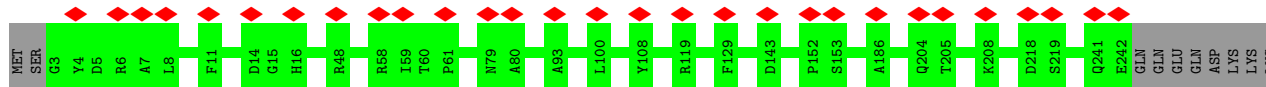
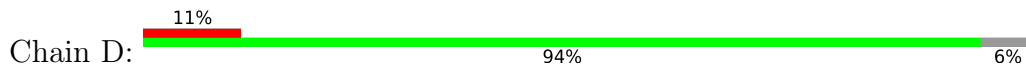
• Molecule 10: Proteasome subunit alpha type-3



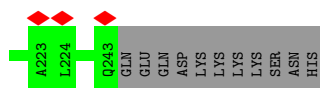
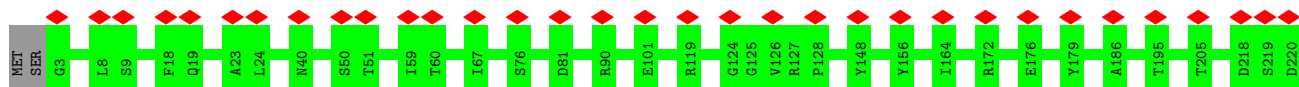
• Molecule 10: Proteasome subunit alpha type-3



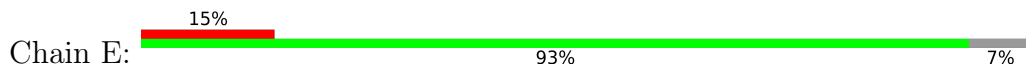
• Molecule 11: Proteasome subunit alpha type-4

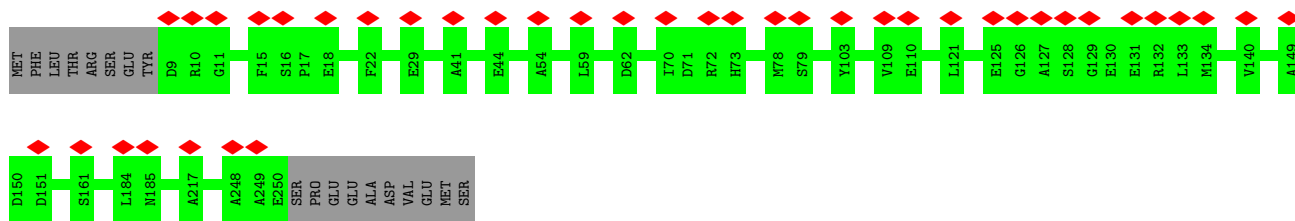


• Molecule 11: Proteasome subunit alpha type-4

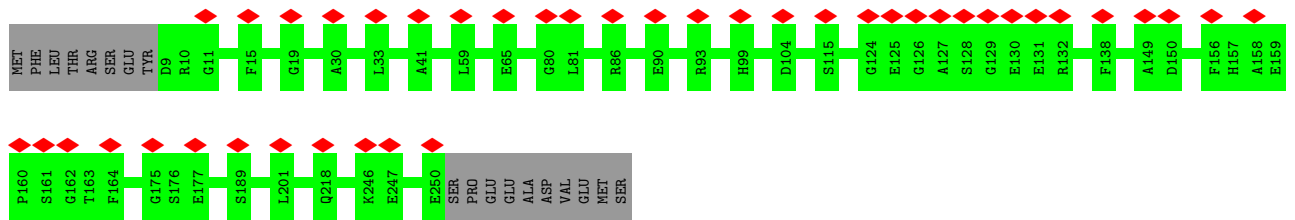
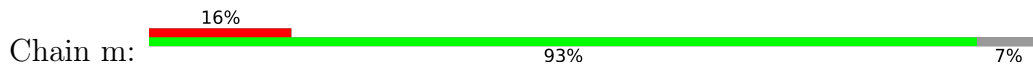


• Molecule 12: Proteasome subunit alpha type-5

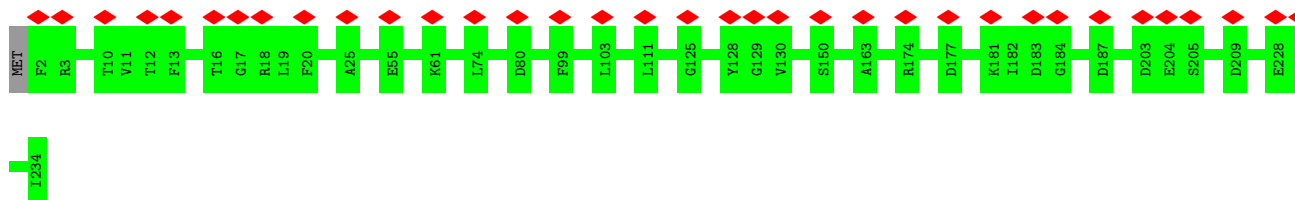




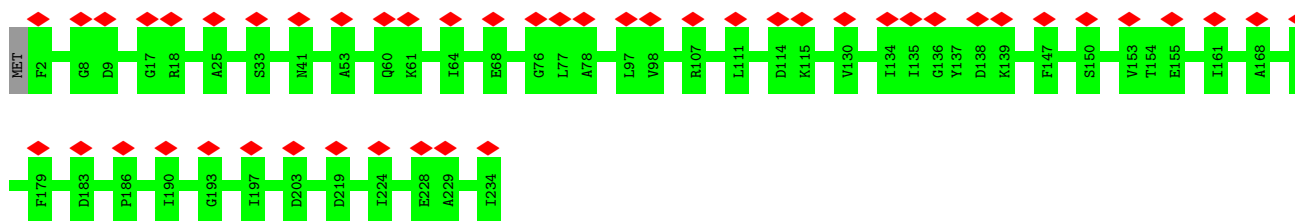
• Molecule 12: Proteasome subunit alpha type-5



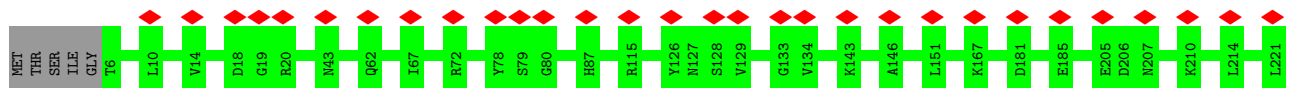
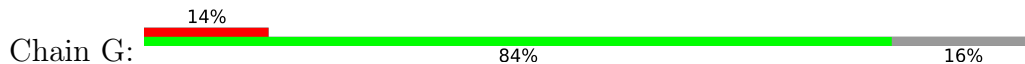
• Molecule 13: Proteasome subunit alpha type-6



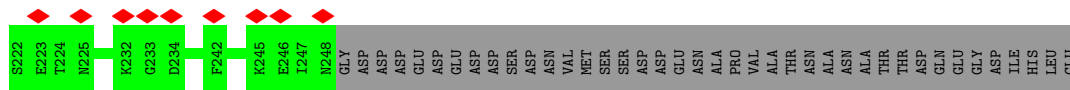
• Molecule 13: Proteasome subunit alpha type-6



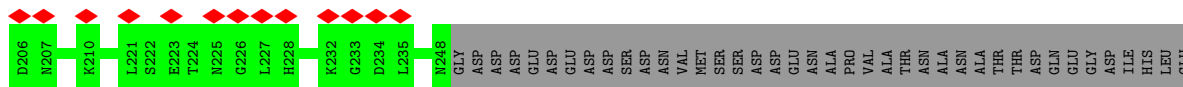
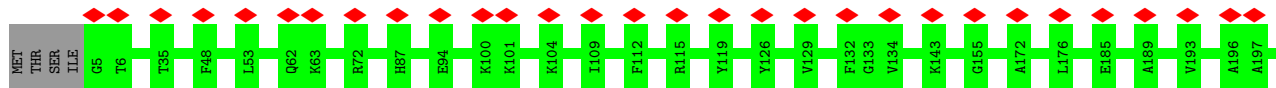
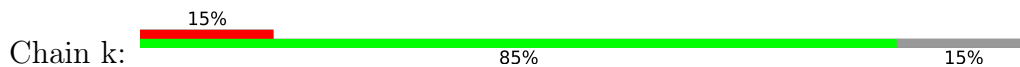
• Molecule 14: Probable proteasome subunit alpha type-7



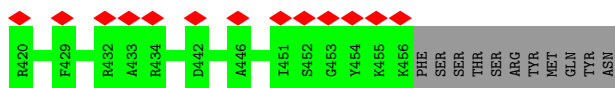
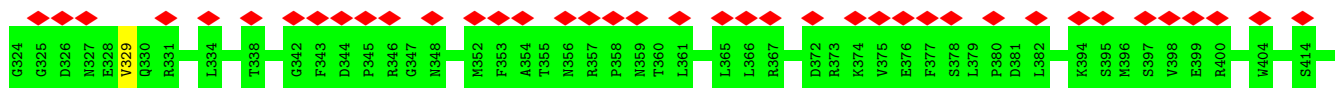
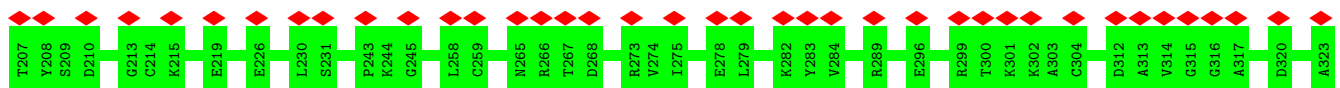
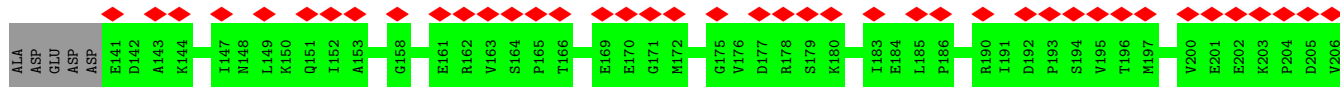
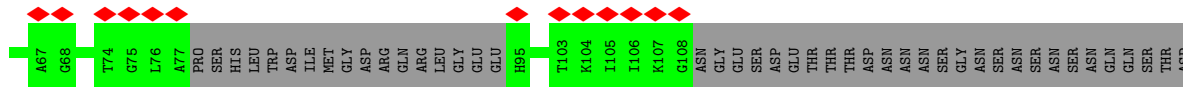
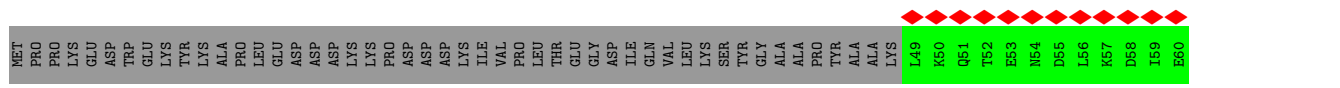
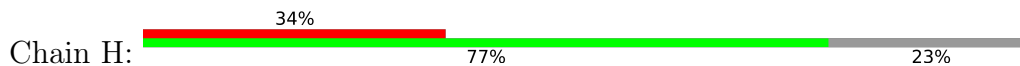




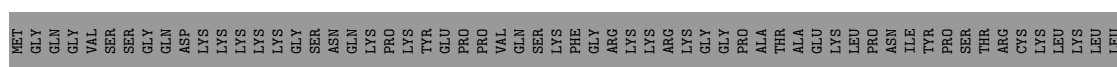
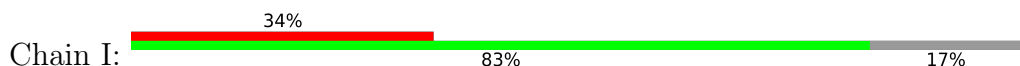
• Molecule 14: Probable proteasome subunit alpha type-7

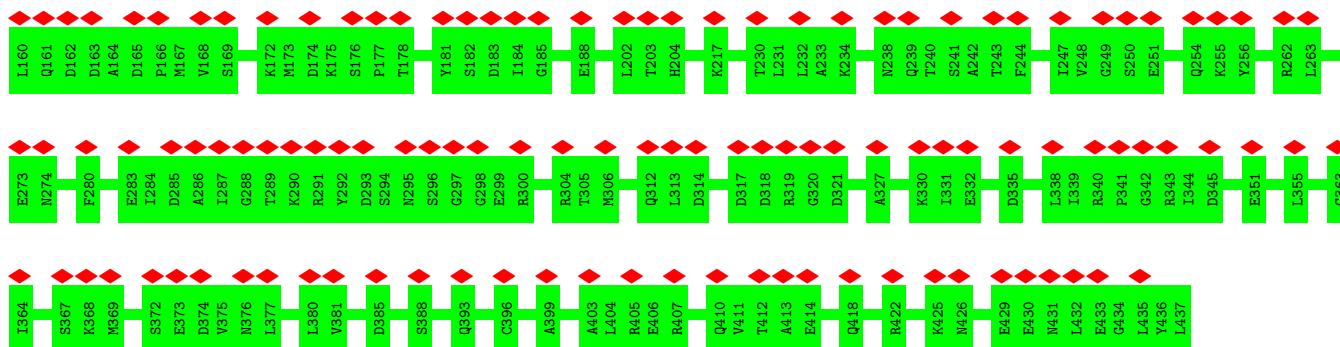


• Molecule 15: 26S protease regulatory subunit 7 homolog

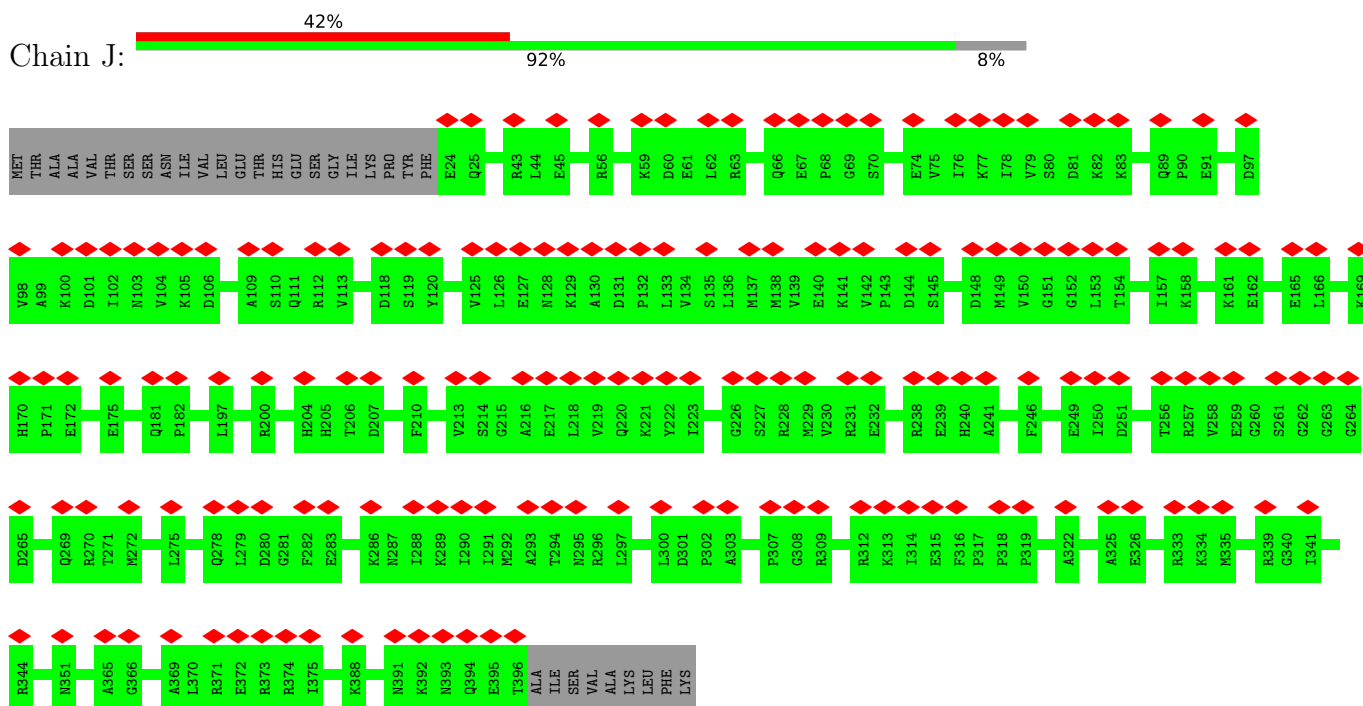


• Molecule 16: 26S protease regulatory subunit 4 homolog

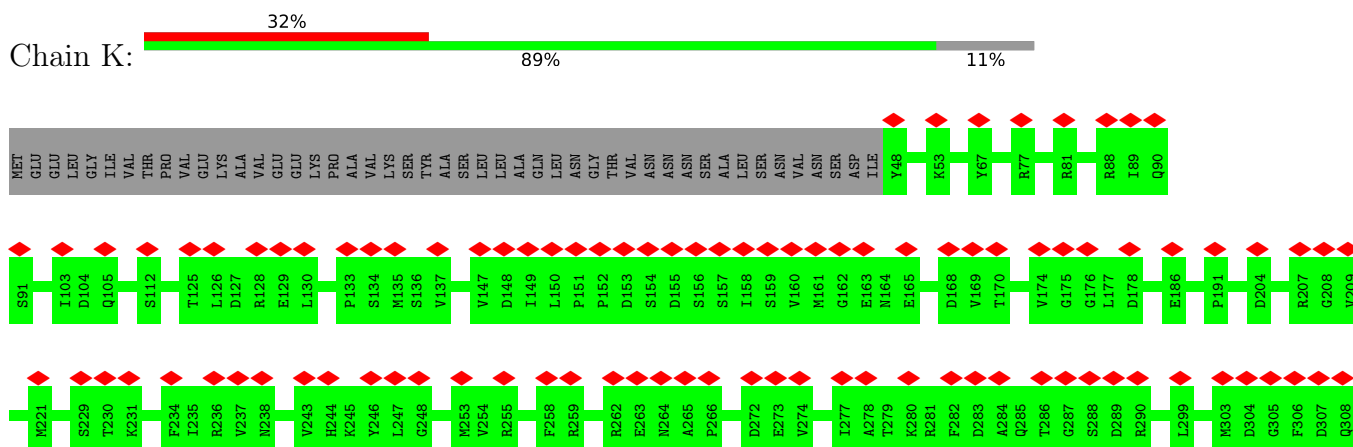


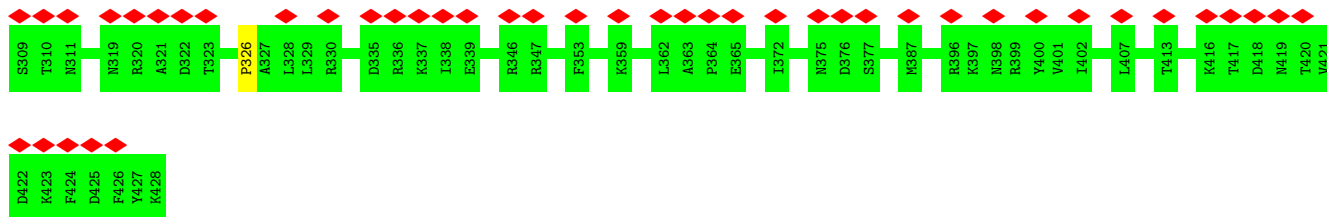


- Molecule 17: 26S protease regulatory subunit 8 homolog

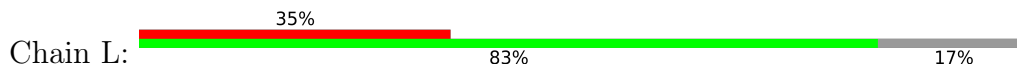


- Molecule 18: 26S protease regulatory subunit 6B homolog

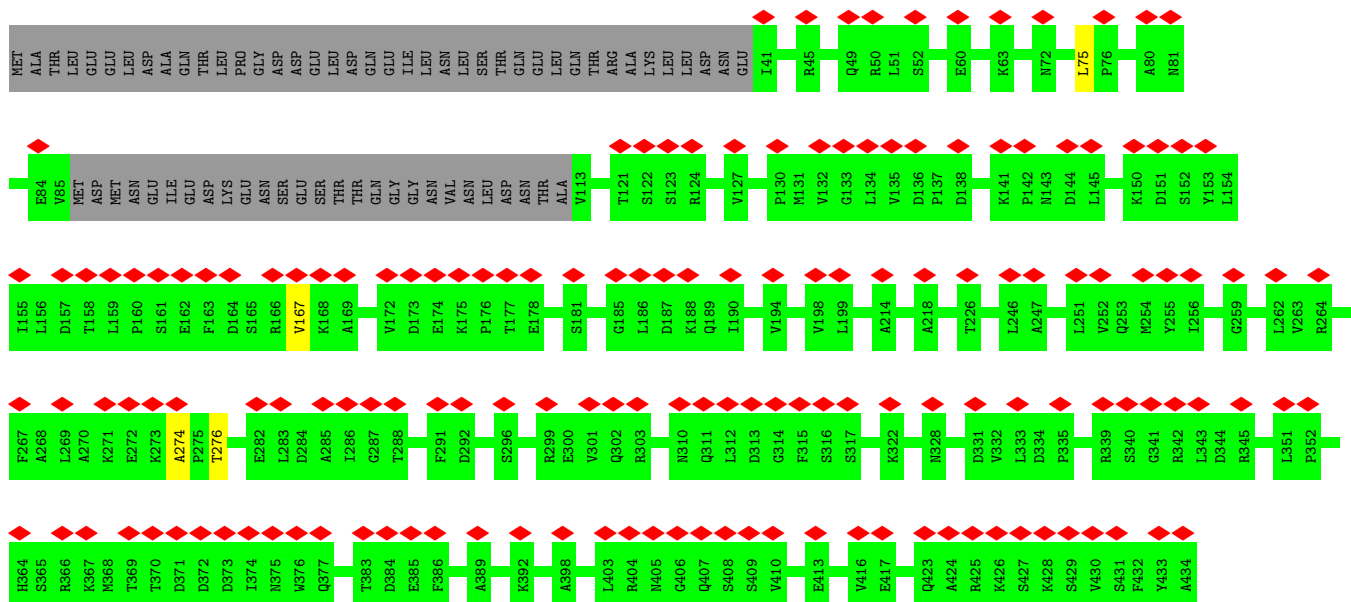
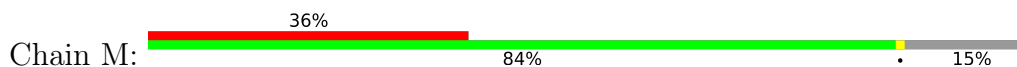




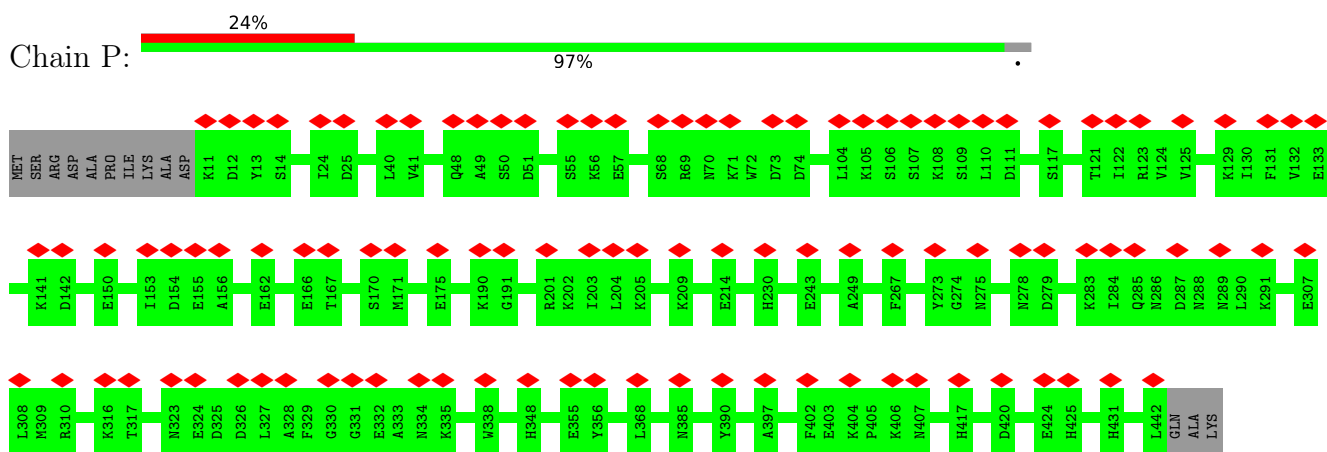
• Molecule 19: 26S protease subunit RPT4



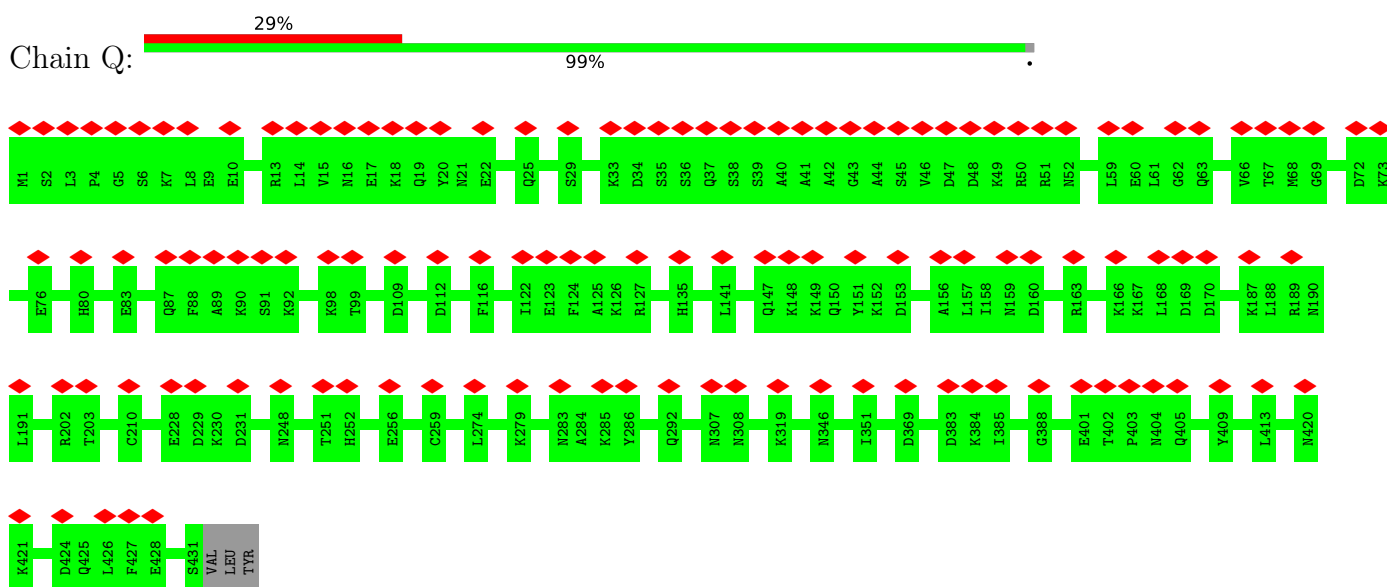
• Molecule 20: 26S protease regulatory subunit 6A



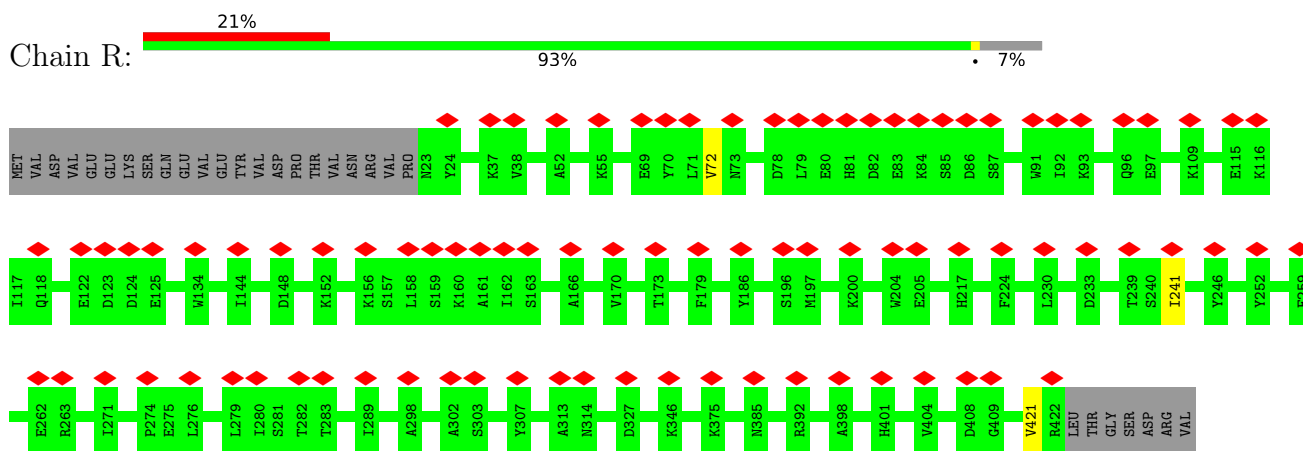




- Molecule 24: 26S proteasome regulatory subunit RPN6

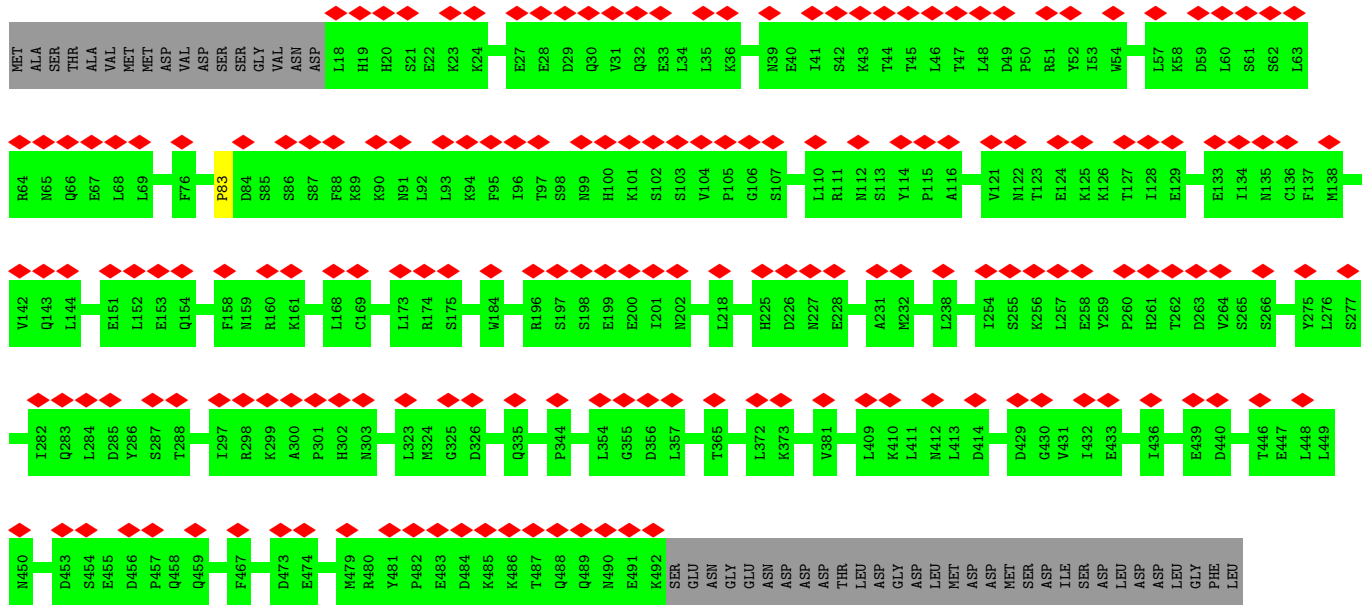


- Molecule 25: 26S proteasome regulatory subunit RPN7

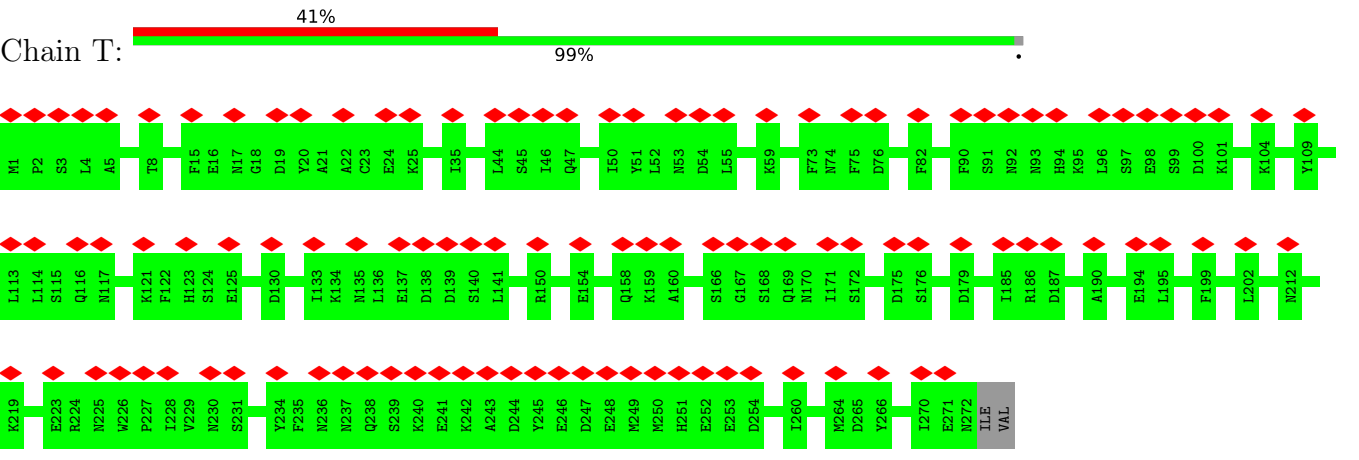


- Molecule 26: 26S proteasome regulatory subunit RPN3

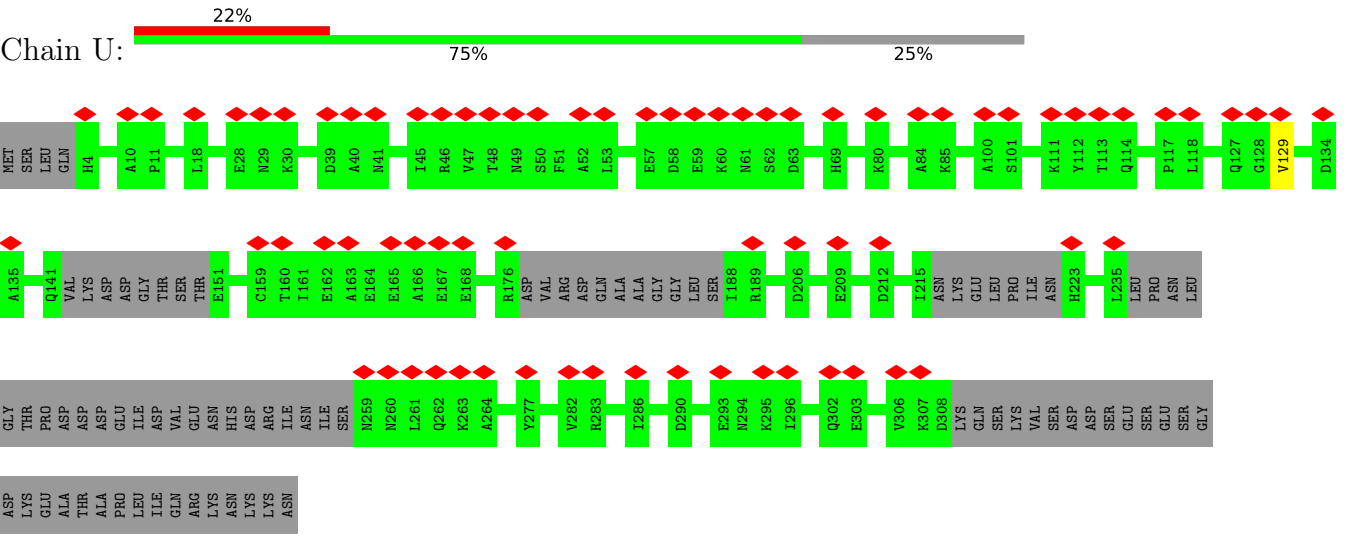




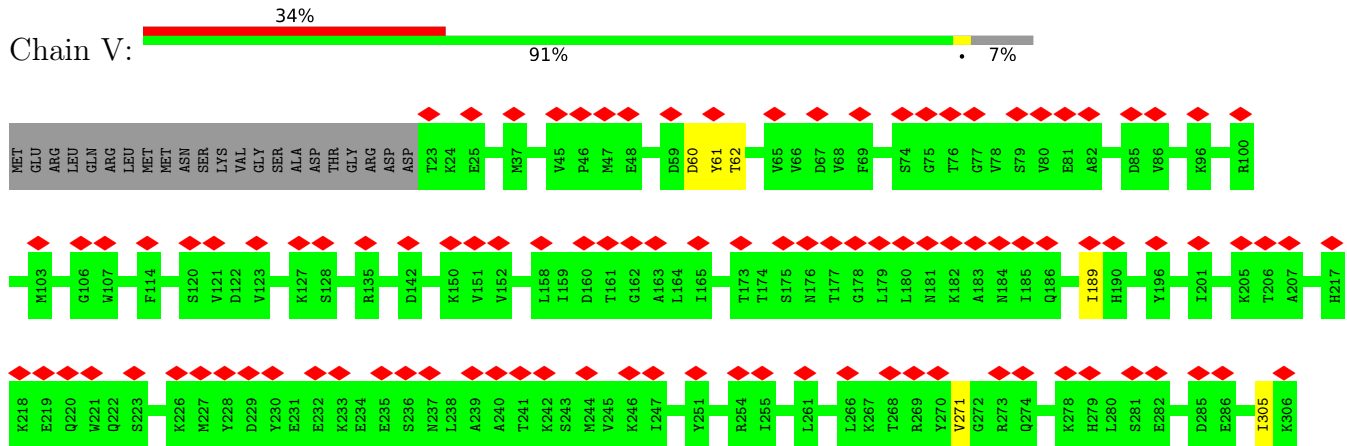
• Molecule 27: 26S proteasome regulatory subunit RPN12



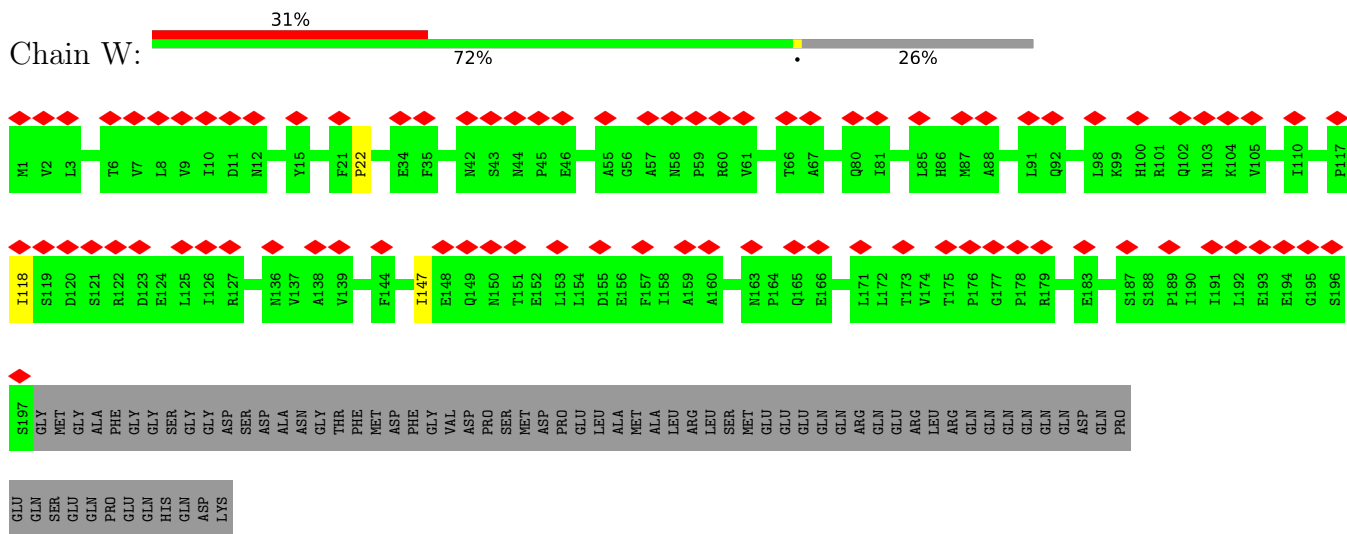
• Molecule 28: 26S proteasome regulatory subunit RPN8



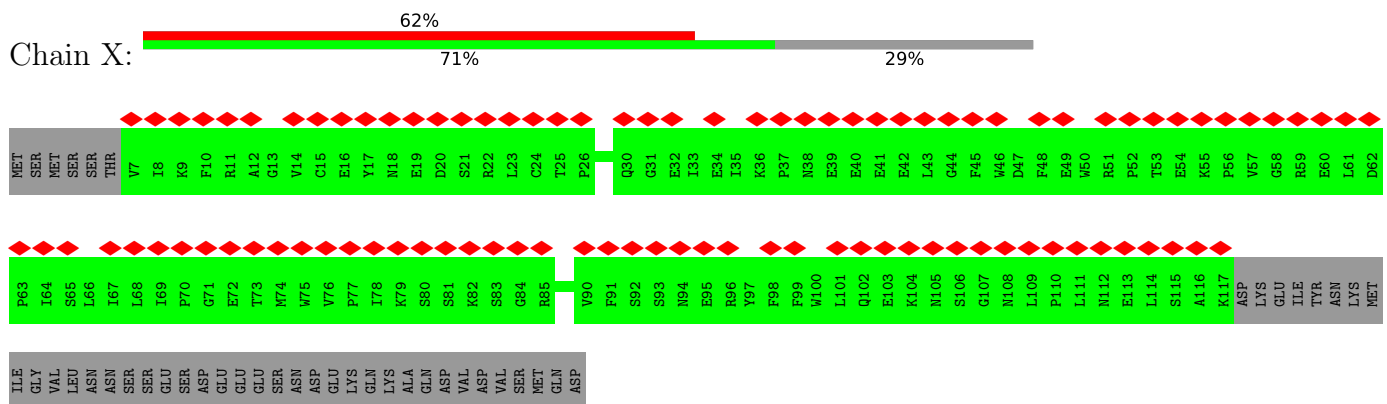
- Molecule 29: Ubiquitin carboxyl-terminal hydrolase RPN11



- Molecule 30: 26S proteasome regulatory subunit RPN10



- Molecule 31: 26S proteasome regulatory subunit RPN13



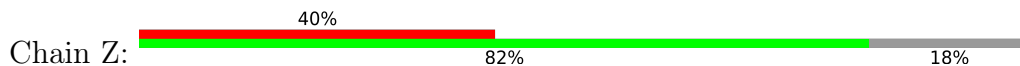
- Molecule 32: 26S proteasome complex subunit SEM1



MET	SER	THR	ASP	VAL	ALA	ALA	GLN	ALA	SER	LYS	LYS	ILE	ASP	LEU	THR	LYS	LYS	ASN	GLU	GLU	ILE	LYS	LYS	ASN	ASN	GLU	GLU	THR	LYS	LYS	PHE	GLU	GLU	GLY	GLU	THR	THR	ILE	LYS	SER	ASN	ALA	ALA	TRP	TRP	ALA	ALA	ASN	ASN	GLY	GLU	GLU	THR	THR	ILE	ILE	TRP
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

GLU	E62	N63	N64	V67	E68	V69	D70	D71	D72	F73	E76	A79	N88	GLN
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

• Molecule 33: 26S proteasome regulatory subunit RPN1



MET	VAL	ASP	GLU	SER	ASP	LYS	LYS	GLN	THR	ILE	ASP	GLU	GLN	SER	LEU	THR	LYS	LYS	PRO	GLU	GLN	THR	PRO	ASN	ASN	LYS	LYS	ASP	LYS	LYS	LYS	LYS	LYS	LYS	GLU	GLU	GLU	GLU	GLN	LEU	SER	GLU	ASP	ALA	LYS	LEU	LYS	THR	ASP	L49	E50	L51	L52	V53	E54	R55	L56	K57	E58	D59	D60
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

S61	S62	L63	Y64	E65	A66	S67	L68	N69	G148	A70	L71	K72	E73	S74	I75	K76	N77	S78	T79	S80	S81	N82	T83	A84	V85	P86	K87	P88	L89	K90	F91	L92	R93	P97	D98	L99	C100	S101	I102	Y103	D104	K105	W106	T107	D108	P109	M110	E58	L111	D59	K112	A123	M124	T125	Y126	S127	E128	M129	G130	K131
-----	-----	-----	-----	-----	-----	-----	-----	-----	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	-----	------	-----	------	------	------	------	------	------	------	------	------	------

H132	D133	S134	L135	R136	Y137	F146	E147	G148	W149	G150	Y153	H156	L159	E160	I161	G162	E163	V169	E170	K171	D172	A173	E174	D175	E176	T177	S178	S179	S182	K183	S184	D185	G186	S187	A188	A189	T190	S191	E194	F195	S196	K197	E198	R202	L203	C204	L205	D206	V208	P209
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Y210	K213	H214	M215	G216	E217	E218	D219	D222	L223	L224	L225	E226	I227	E228	S229	I230	E239	N240	T241	F242	Q243	R244	V245	V250	A251	C252	V253	P254	L255	E260	D261	V262	A263	Y269	S270	I271	Y272	L273	S274	Q275	L278	V286	R287	L288	D289	D292	R295	S296	V297	S302	D303	P304	V305	M306	A316	Q317	K318	T319	S320	F321	E322	Y323	E324	G325	I329	I330	G331	N332	G333	K334	L335	S336	E337	H338	A343	K344	S360	D363	N364	S365	K366	S367	V368	F369	S370	S371	A372	G373	L374	D375	S376	A377	Q378	Q379	C395	N396	D397	K398	D402
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

M403	D404	M405	W406	V407	Y408	S417	M429	L430	Q434	D437	K438	Y441	V442	D443	E444	K448	L452	L453	V467	E468	L472	L473	L474	Q475	D476	T479	M480	P481	D482	T483	S486	L491	K501	N502	D503	E504	V505	L506	G507	S615	T516	D517	L518	P519	I520	S296	V297	S302	D303	P304	V305	M306	A316	Q317	K318	T319	S320	F321	E322	Y323	E324	G325	I329	I330	G331	N332	G333	K334	L335	S336	E337	H338	A343	K344	S360	D363	N364	S365	K366	S367	V368	F369	S370	S371	A372	G373	L374	D375	S376	A377	Q378	Q379	C395	N396	D397	K398	D402
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

M403	D404	M405	W406	V407	Y408	S417	M429	L430	Q434	D437	K438	Y441	V442	D443	E444	K448	L452	L453	V467	E468	L472	L473	L474	Q475	D476	T479	M480	P481	D482	T483	S486	L491	K501	N502	D503	E504	V505	L506	G507	S615	T516	D517	L518	P519	I520	S296	V297	S302	D303	P304	V305	M306	A316	Q317	K318	T319	S320	F321	E322	Y323	E324	G325	I329	I330	G331	N332	G333	K334	L335	S336	E337	H338	A343	K344	S360	D363	N364	S365	K366	S367	V368	F369	S370	S371	A372	G373	L374	D375	S376	A377	Q378	Q379	C395	N396	D397	K398	D402
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

E521	T522	A523	A524	M525	A526	H532	D541	F550	L551	E552	A555	I556	M562	L566	A567	L568	A569	L570	G571	Q577	G578	E579	Q580	V581	V584	L585	E586	T587	I588	A598	V601	L602	V603	G604	S605	C606	A607	Y608	D613	V614	H622	T625	PRO	LYS	ASN	VAL	E521	T522	A523	A524	M525	A526	H532	D541	F550	L551	E552	A555	I556	M562	L566	A567	L568	A569	L570	G571	Q577	G578	E579	Q580	V581	V584	L585	E586	T587	I588	A598	V601	L602	V603	G604	S605	C606	A607	Y608	D613	V614	H622	T625	PRO	LYS	ASN	VAL
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----

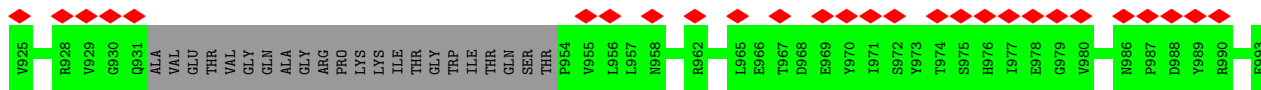
LYS	GLY	GLU	GLU	ASP	ALA	ASP	GLU	GLU	THR	ALA	GLU	GLY	THR	GLN	THR	ASN	ILE	SER	ASP	PHE	GLY	GLY	GLU	GLN	VAL	VAL	ASN	GLU	PRO	THR	LYS	ASN	ASN	GLU	GLU	ALA	ALA	ILE	VAL	ASP	MET	GLU	VAL	VAL	ASP	ALA	ALA	GLY	GLY	GLU	GLU	VAL	VAL	VAL	VAL	LYS	ALA	GLU	ILE	THR	GLU
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LYS	LYS	ASN	GLY	GLU	SER	LEU	GLY	GLU	GLU	GLU	ILE	LYS	SER	GLY	LYS	LYS	LYS	SER	ASP	ASP	ASP	ASP	ASP	ASP	ALA	THR	THR	ASP	GLY	PRO	LYS	ASN	ASN	ASP	ASP	GLU	GLU	GLU	GLU	GLU	GLU	GLY	GLY	GLU	GLU	VAL	VAL	VAL	VAL	ASP	L736	A737	L743	I746	A747	L748	D751	E755	L758
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------

K759	H760	F761	H766	E770	H771	R774	M775	V776	F777	L778	A779	H780	V783	D787	H790	F793	R798	F799	S800	H801	D802	A803	D804	L805	LYS	GLY	E806	V807	S808	M809	N810	S811	I812	F813	A814	M815	C816	L817	N823	N824	A825	R826	O829	R832	Q833	L834	A835	S836	Y837	Y838
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

S839	R840	E841	Q842	D843	L844	L845	F846	T847	T848	L855	G860	M864	D865	V866	F867	H871	K875	V876	T877	L878	L882	T883	T884	A885	V886	S892	F893	M894	L895	K896	H897	L900	F901	L904	N905	A906	P910	K911	F912	I913	L914	D918	E919	G920	E921	P922	I923	K924
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------





## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	8320	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 ( $e^-/\text{\AA}^2$ )	38	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	2.100	Depositor
Minimum map value	-1.052	Depositor
Average map value	0.013	Depositor
Map value standard deviation	0.102	Depositor
Recommended contour level	0.657	Depositor
Map size (Å)	474.47998, 474.47998, 474.47998	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.318, 1.318, 1.318	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	1	0.23	0/1541	0.41	0/2087
1	b	0.23	0/1541	0.41	0/2087
2	2	0.23	0/1750	0.40	0/2373
2	i	0.23	0/1750	0.42	0/2373
3	3	0.24	0/1611	0.40	0/2174
3	h	0.24	0/1611	0.41	0/2174
4	4	0.23	0/1589	0.38	0/2142
4	g	0.23	0/1589	0.39	0/2142
5	5	0.23	0/1681	0.39	0/2274
5	f	0.23	0/1681	0.40	0/2274
6	6	0.24	0/1795	0.39	0/2420
6	e	0.24	0/1795	0.39	0/2420
7	7	0.24	0/1821	0.41	0/2470
7	a	0.24	0/1846	0.42	0/2503
8	A	0.23	0/1945	0.38	0/2634
8	c	0.23	0/1959	0.39	0/2652
9	B	0.24	0/1952	0.41	0/2642
9	j	0.24	0/1952	0.40	0/2642
10	C	0.23	0/1934	0.40	0/2618
10	d	0.23	0/1934	0.40	0/2618
11	D	0.23	0/1910	0.39	0/2586
11	n	0.23	0/1919	0.40	0/2598
12	E	0.23	0/1886	0.40	0/2541
12	m	0.23	0/1886	0.40	0/2541
13	F	0.24	0/1823	0.41	0/2463
13	l	0.24	0/1823	0.40	0/2463
14	G	0.23	0/1932	0.38	0/2609
14	k	0.23	0/1936	0.39	0/2614
15	H	0.24	0/2831	0.41	0/3808
16	I	0.24	0/2869	0.41	0/3867
17	J	0.23	0/2964	0.40	0/3981
18	K	0.23	0/3062	0.39	0/4132
19	L	0.24	0/2896	0.39	0/3895
20	M	0.31	1/2903 (0.0%)	0.41	0/3909

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
21	N	0.24	0/6670	0.39	0/9023
22	O	0.23	0/3243	0.39	0/4374
23	P	0.22	0/3599	0.36	0/4854
24	Q	0.23	0/3527	0.38	0/4748
25	R	0.23	0/3272	0.39	0/4412
26	S	0.23	0/3966	0.37	0/5355
27	T	0.24	0/2279	0.40	0/3077
28	U	0.23	0/2087	0.37	0/2811
29	V	0.23	0/2271	0.44	0/3064
30	W	0.25	0/1557	0.42	0/2111
31	X	0.23	0/931	0.41	0/1262
32	Y	0.22	0/239	0.40	0/322
33	Z	0.26	1/6404 (0.0%)	0.40	0/8686
All	All	0.24	2/107962 (0.0%)	0.40	0/145825

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	75	LEU	C-N	9.87	1.53	1.34
33	Z	468	GLU	C-N	9.19	1.51	1.34

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-close contacts [i](#)

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

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	1	194/215 (90%)	189 (97%)	5 (3%)	0	100	100
1	b	194/215 (90%)	189 (97%)	5 (3%)	0	100	100
2	2	224/261 (86%)	218 (97%)	6 (3%)	0	100	100
2	i	224/261 (86%)	220 (98%)	4 (2%)	0	100	100
3	3	202/205 (98%)	193 (96%)	9 (4%)	0	100	100
3	h	202/205 (98%)	189 (94%)	12 (6%)	1 (0%)	29	69
4	4	193/198 (98%)	188 (97%)	5 (3%)	0	100	100
4	g	193/198 (98%)	188 (97%)	5 (3%)	0	100	100
5	5	210/287 (73%)	208 (99%)	2 (1%)	0	100	100
5	f	210/287 (73%)	203 (97%)	7 (3%)	0	100	100
6	6	220/241 (91%)	215 (98%)	5 (2%)	0	100	100
6	e	220/241 (91%)	213 (97%)	7 (3%)	0	100	100
7	7	227/266 (85%)	218 (96%)	9 (4%)	0	100	100
7	a	230/266 (86%)	223 (97%)	7 (3%)	0	100	100
8	A	239/252 (95%)	231 (97%)	8 (3%)	0	100	100
8	c	241/252 (96%)	234 (97%)	7 (3%)	0	100	100
9	B	248/250 (99%)	240 (97%)	8 (3%)	0	100	100
9	j	248/250 (99%)	238 (96%)	10 (4%)	0	100	100
10	C	242/258 (94%)	237 (98%)	5 (2%)	0	100	100
10	d	242/258 (94%)	233 (96%)	9 (4%)	0	100	100
11	D	238/254 (94%)	228 (96%)	10 (4%)	0	100	100
11	n	239/254 (94%)	231 (97%)	8 (3%)	0	100	100
12	E	240/260 (92%)	229 (95%)	11 (5%)	0	100	100
12	m	240/260 (92%)	233 (97%)	7 (3%)	0	100	100
13	F	231/234 (99%)	220 (95%)	11 (5%)	0	100	100
13	l	231/234 (99%)	222 (96%)	9 (4%)	0	100	100
14	G	241/288 (84%)	236 (98%)	5 (2%)	0	100	100
14	k	242/288 (84%)	237 (98%)	5 (2%)	0	100	100
15	H	353/467 (76%)	311 (88%)	41 (12%)	1 (0%)	41	77
16	I	361/437 (83%)	334 (92%)	27 (8%)	0	100	100
17	J	371/405 (92%)	350 (94%)	21 (6%)	0	100	100
18	K	379/428 (89%)	343 (90%)	35 (9%)	1 (0%)	41	77

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	L	359/437 (82%)	335 (93%)	24 (7%)	0	100	100
20	M	363/434 (84%)	336 (93%)	24 (7%)	3 (1%)	19	60
21	N	843/945 (89%)	793 (94%)	47 (6%)	3 (0%)	34	72
22	O	385/393 (98%)	348 (90%)	36 (9%)	1 (0%)	41	77
23	P	430/445 (97%)	390 (91%)	40 (9%)	0	100	100
24	Q	429/434 (99%)	398 (93%)	31 (7%)	0	100	100
25	R	398/429 (93%)	357 (90%)	38 (10%)	3 (1%)	19	60
26	S	473/523 (90%)	451 (95%)	21 (4%)	1 (0%)	47	81
27	T	270/274 (98%)	239 (88%)	31 (12%)	0	100	100
28	U	245/338 (72%)	240 (98%)	4 (2%)	1 (0%)	34	72
29	V	282/306 (92%)	243 (86%)	33 (12%)	6 (2%)	7	36
30	W	195/268 (73%)	174 (89%)	18 (9%)	3 (2%)	10	46
31	X	109/156 (70%)	96 (88%)	13 (12%)	0	100	100
32	Y	25/89 (28%)	18 (72%)	6 (24%)	1 (4%)	3	23
33	Z	807/993 (81%)	743 (92%)	64 (8%)	0	100	100
All	All	13382/15139 (88%)	12602 (94%)	755 (6%)	25 (0%)	50	81

5 of 25 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
15	H	329	VAL
29	V	61	TYR
3	h	105	VAL
20	M	274	ALA
29	V	62	THR

### 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	1	162/178 (91%)	162 (100%)	0	100	100

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	b	162/178 (91%)	162 (100%)	0	100	100
2	2	185/214 (86%)	185 (100%)	0	100	100
2	i	185/214 (86%)	185 (100%)	0	100	100
3	3	172/173 (99%)	172 (100%)	0	100	100
3	h	172/173 (99%)	172 (100%)	0	100	100
4	4	173/175 (99%)	173 (100%)	0	100	100
4	g	173/175 (99%)	173 (100%)	0	100	100
5	5	169/235 (72%)	169 (100%)	0	100	100
5	f	169/235 (72%)	169 (100%)	0	100	100
6	6	185/201 (92%)	185 (100%)	0	100	100
6	e	185/201 (92%)	185 (100%)	0	100	100
7	7	195/224 (87%)	195 (100%)	0	100	100
7	a	198/224 (88%)	198 (100%)	0	100	100
8	A	206/210 (98%)	206 (100%)	0	100	100
8	c	207/210 (99%)	207 (100%)	0	100	100
9	B	209/209 (100%)	209 (100%)	0	100	100
9	j	209/209 (100%)	209 (100%)	0	100	100
10	C	203/216 (94%)	203 (100%)	0	100	100
10	d	203/216 (94%)	203 (100%)	0	100	100
11	D	212/226 (94%)	212 (100%)	0	100	100
11	n	213/226 (94%)	213 (100%)	0	100	100
12	E	198/215 (92%)	198 (100%)	0	100	100
12	m	198/215 (92%)	198 (100%)	0	100	100
13	F	192/193 (100%)	192 (100%)	0	100	100
13	l	192/193 (100%)	192 (100%)	0	100	100
14	G	201/239 (84%)	201 (100%)	0	100	100
14	k	201/239 (84%)	201 (100%)	0	100	100
15	H	303/399 (76%)	303 (100%)	0	100	100
16	I	320/385 (83%)	320 (100%)	0	100	100
17	J	325/352 (92%)	325 (100%)	0	100	100
18	K	334/374 (89%)	334 (100%)	0	100	100

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
19	L	308/377 (82%)	308 (100%)	0	100	100
20	M	315/375 (84%)	315 (100%)	0	100	100
21	N	713/797 (90%)	713 (100%)	0	100	100
22	O	363/368 (99%)	363 (100%)	0	100	100
23	P	405/415 (98%)	405 (100%)	0	100	100
24	Q	388/391 (99%)	388 (100%)	0	100	100
25	R	351/379 (93%)	351 (100%)	0	100	100
26	S	447/489 (91%)	447 (100%)	0	100	100
27	T	254/256 (99%)	254 (100%)	0	100	100
28	U	234/308 (76%)	234 (100%)	0	100	100
29	V	249/268 (93%)	249 (100%)	0	100	100
30	W	171/230 (74%)	171 (100%)	0	100	100
31	X	101/144 (70%)	101 (100%)	0	100	100
32	Y	26/81 (32%)	26 (100%)	0	100	100
33	Z	692/850 (81%)	692 (100%)	0	100	100
All	All	11628/13054 (89%)	11628 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 104 such sidechains are listed below:

Mol	Chain	Res	Type
15	H	182	ASN
23	P	30	ASN
33	Z	361	HIS
15	H	359	ASN
21	N	34	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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



## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

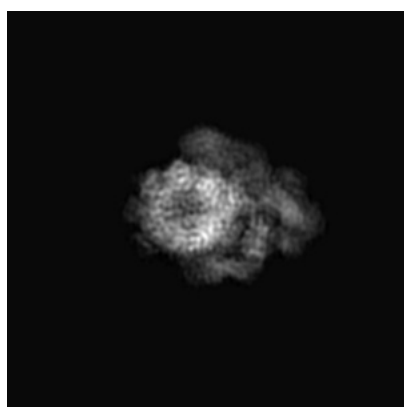
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-9769. These allow visual inspection of the internal detail of the map and identification of artifacts.

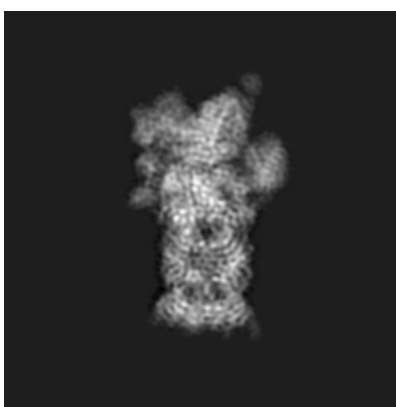
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

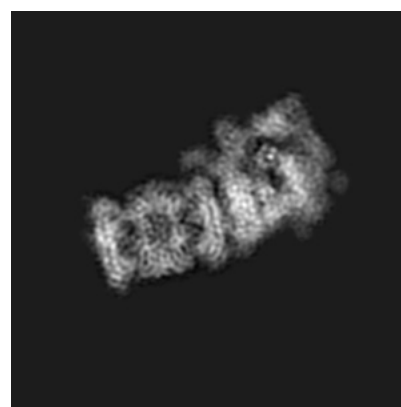
#### 6.1.1 Primary map



X



Y

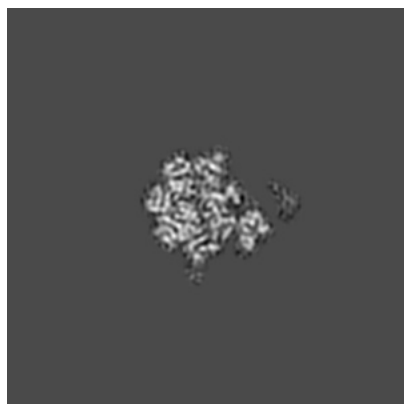


Z

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

### 6.2 Central slices [i](#)

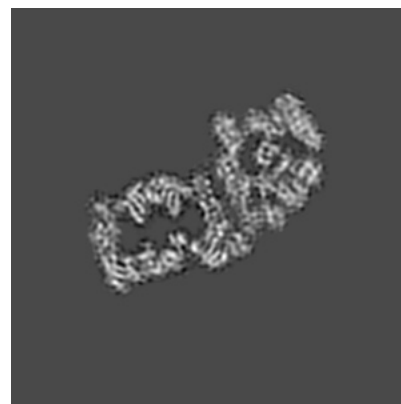
#### 6.2.1 Primary map



X Index: 180



Y Index: 180

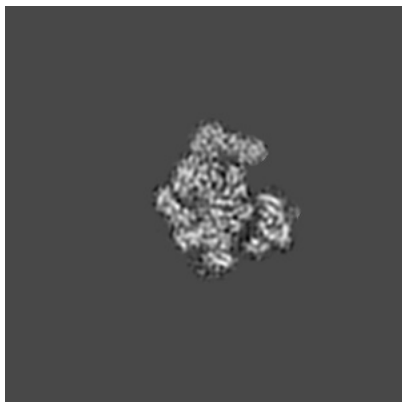


Z Index: 180

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

## 6.3 Largest variance slices [i](#)

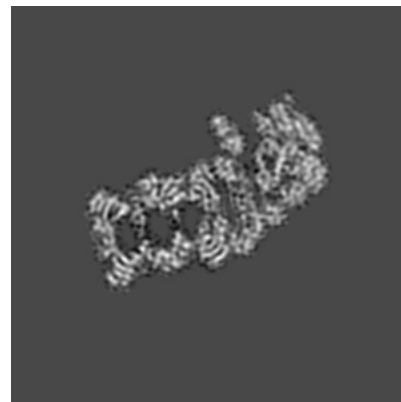
### 6.3.1 Primary map



X Index: 204



Y Index: 183



Z Index: 187

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

## 6.4 Orthogonal surface views [i](#)

### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.657. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

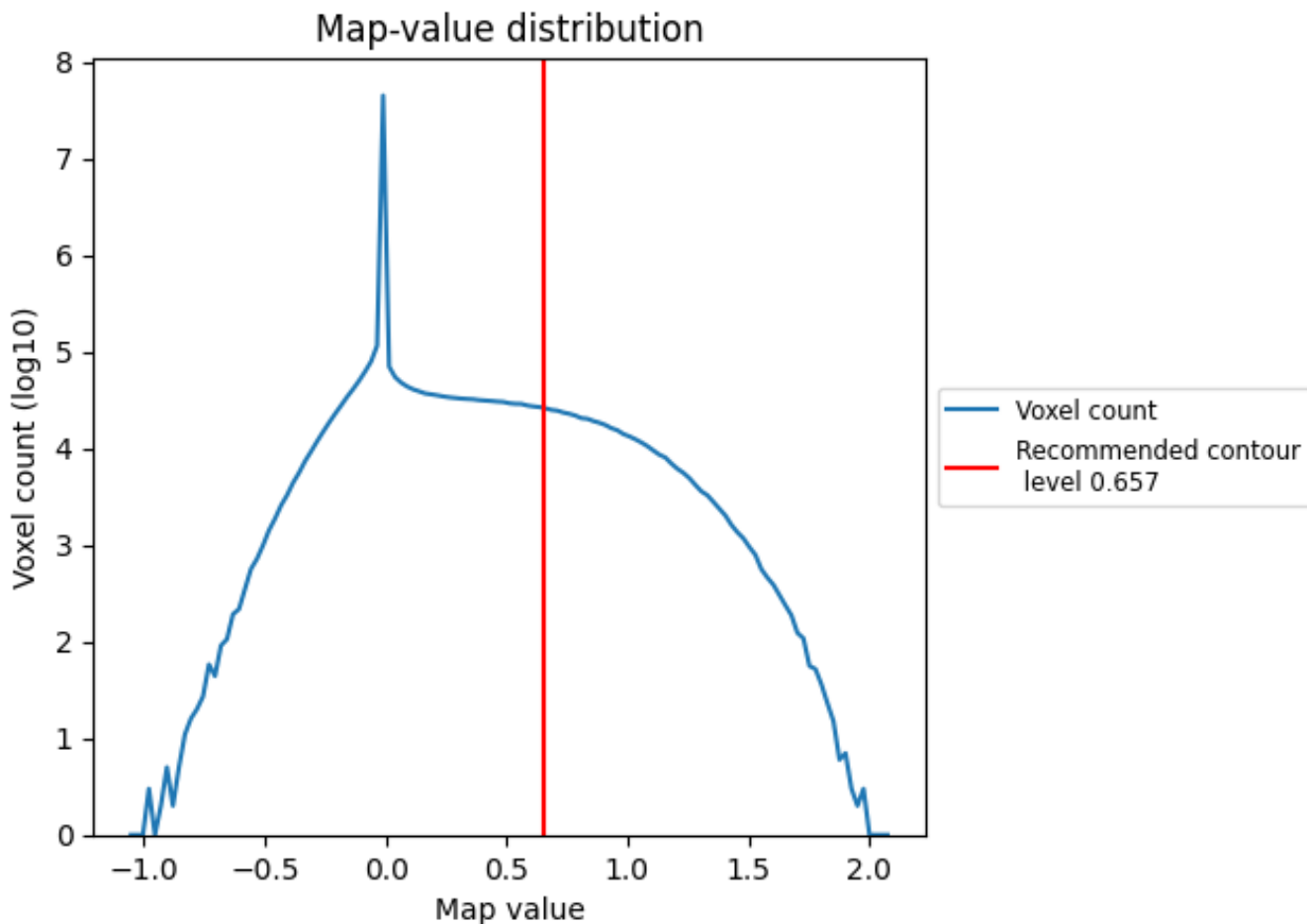
## 6.5 Mask visualisation

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

## 7 Map analysis [i](#)

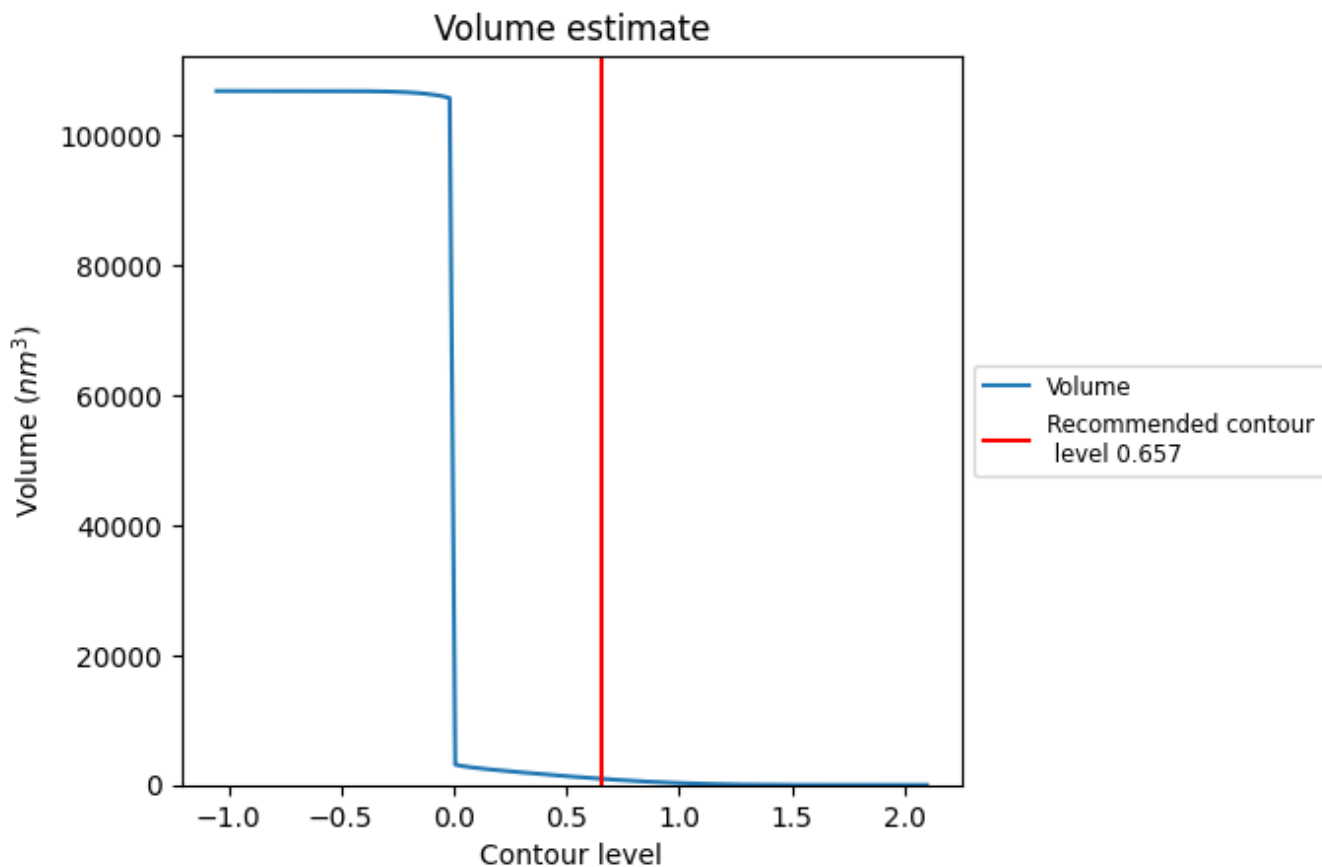
This section contains the results of statistical analysis of the map.

### 7.1 Map-value distribution [i](#)



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.

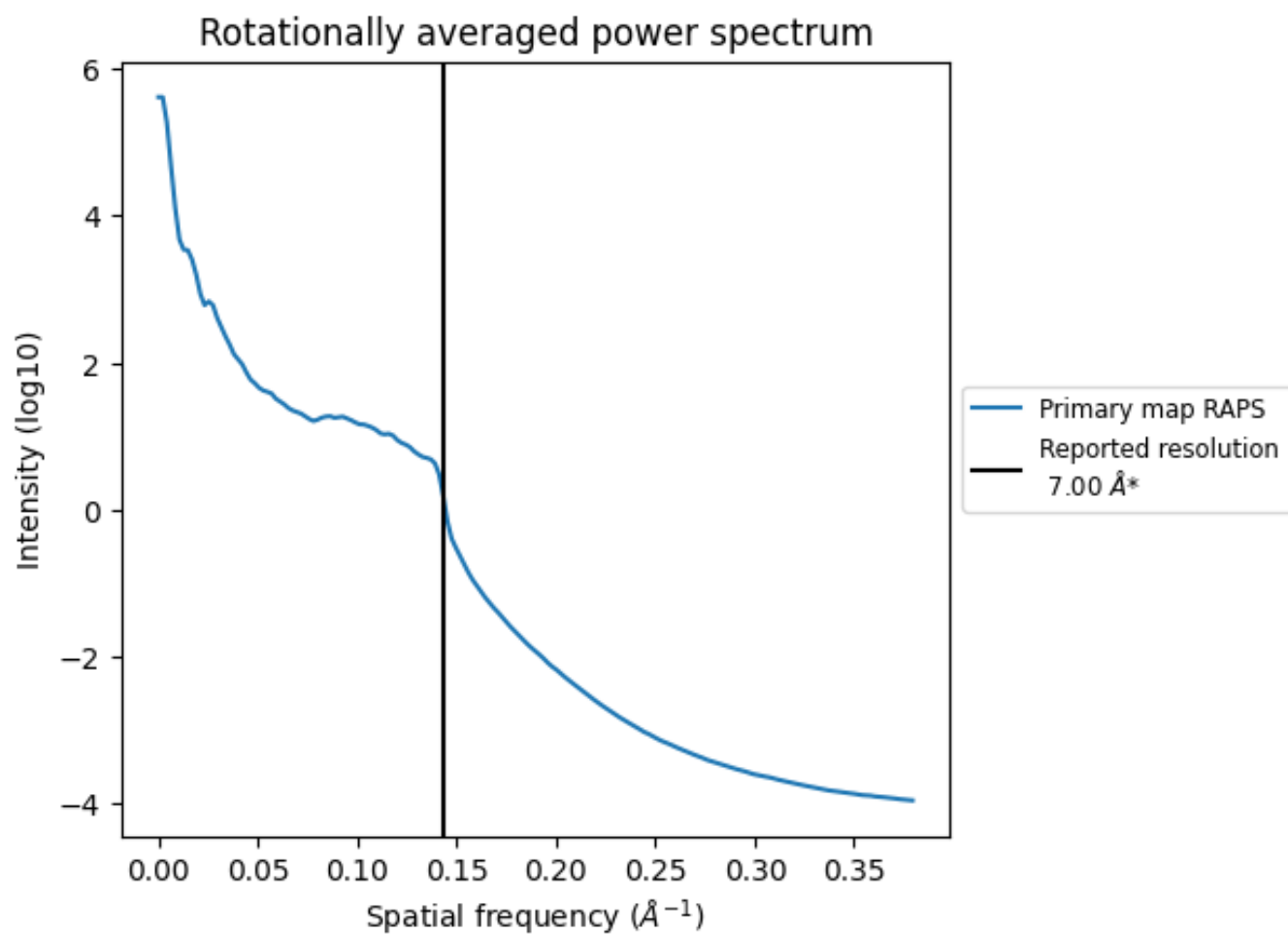
## 7.2 Volume estimate [\(i\)](#)



The volume at the recommended contour level is 945 nm<sup>3</sup>; this corresponds to an approximate mass of 854 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  $0.143 \text{\AA}^{-1}$

## 8 Fourier-Shell correlation

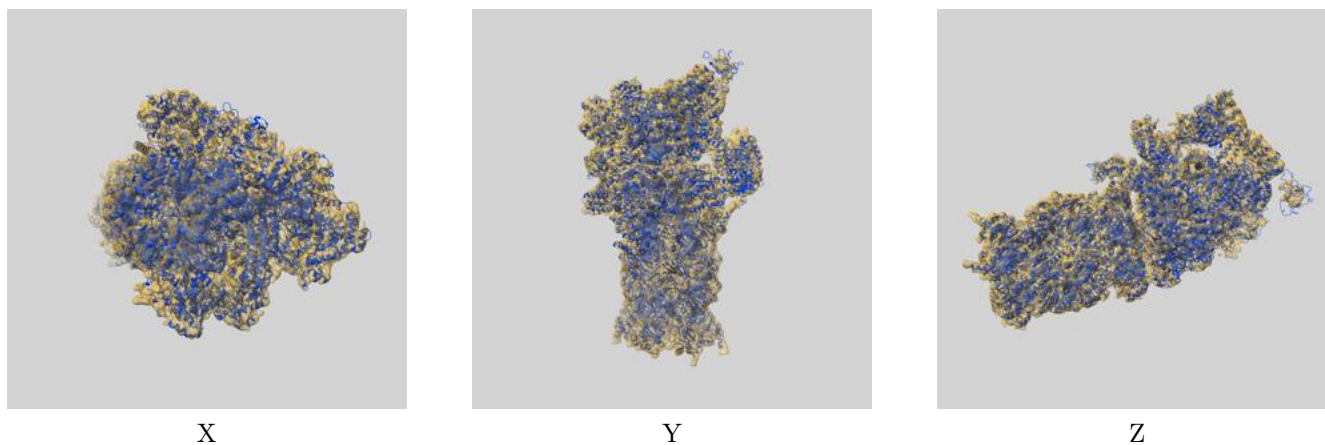
This section was not generated. No FSC curve or half-maps provided.



## 9 Map-model fit [i](#)

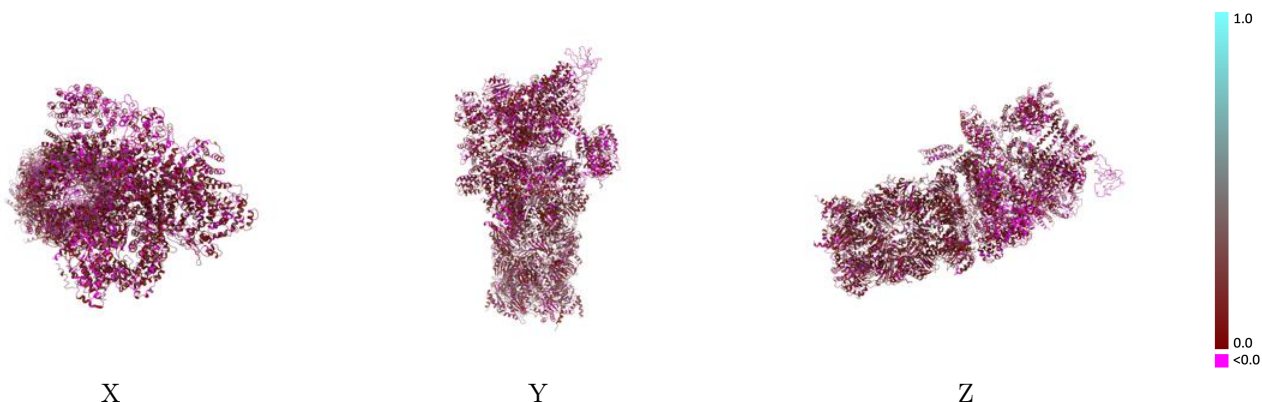
This section contains information regarding the fit between EMDB map EMD-9769 and PDB model 6J2C. Per-residue inclusion information can be found in section 3 on page 11.

### 9.1 Map-model overlay [i](#)



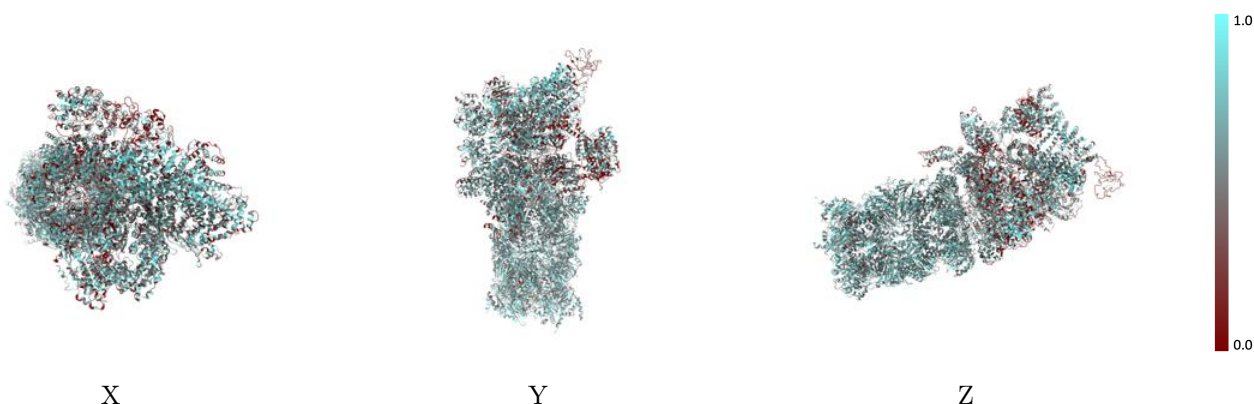
The images above show the 3D surface view of the map at the recommended contour level 0.657 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [i](#)



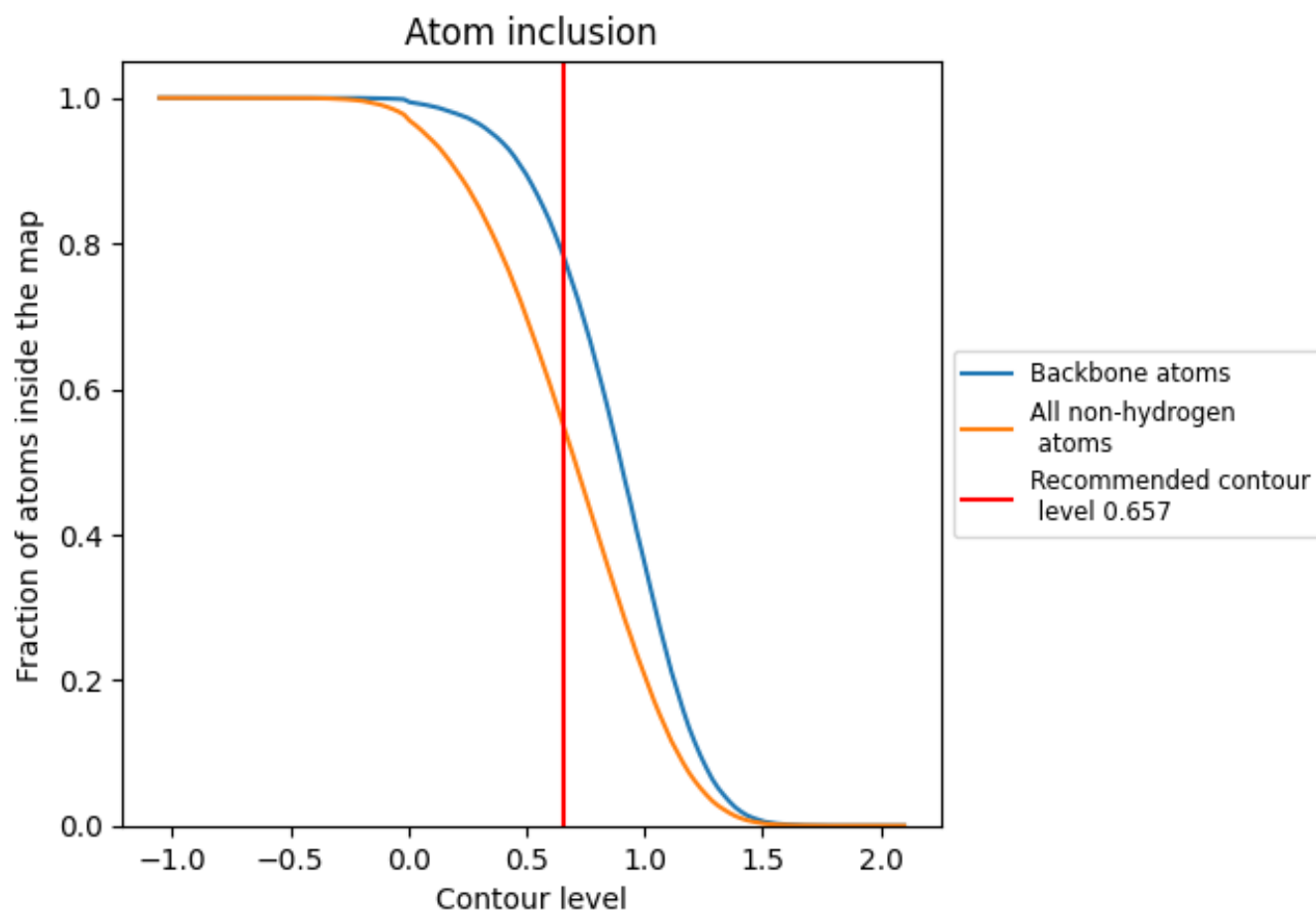
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 [i](#)



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 (0.657).







































































## 9.4 Atom inclusion [i](#)



At the recommended contour level, 78% of all backbone atoms, 55% 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 (0.657) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5504	 0.1170
1	 0.6152	 0.1440
2	 0.6275	 0.1540
3	 0.6060	 0.1300
4	 0.5988	 0.1350
5	 0.6352	 0.1470
6	 0.6365	 0.1430
7	 0.6366	 0.1480
A	 0.5767	 0.1440
B	 0.5666	 0.1330
C	 0.5883	 0.1410
D	 0.6058	 0.1390
E	 0.5908	 0.1500
F	 0.6134	 0.1320
G	 0.6192	 0.1430
H	 0.4716	 0.0780
I	 0.4640	 0.0960
J	 0.4287	 0.0980
K	 0.4830	 0.1140
L	 0.4618	 0.0930
M	 0.4678	 0.0860
N	 0.6166	 0.1120
O	 0.5061	 0.0970
P	 0.5604	 0.1200
Q	 0.5283	 0.1140
R	 0.5699	 0.1160
S	 0.4883	 0.1050
T	 0.4604	 0.0960
U	 0.5300	 0.1090
V	 0.4921	 0.0890
W	 0.4663	 0.0720
X	 0.1227	 -0.0200
Y	 0.4957	 0.0870
Z	 0.4277	 0.0620
a	 0.6029	 0.1490



*Continued on next page...*

*Continued from previous page...*

Chain	Atom inclusion	Q-score
b	 0.6206	 0.1380
c	 0.6244	 0.1380
d	 0.5990	 0.1270
e	 0.6266	 0.1470
f	 0.6401	 0.1500
g	 0.6237	 0.1490
h	 0.6195	 0.1400
i	 0.6104	 0.1430
j	 0.5920	 0.1300
k	 0.6404	 0.1400
l	 0.6407	 0.1380
m	 0.6127	 0.1370
n	 0.6180	 0.1390