



Full wwPDB EM Validation Report ⓘ

Mar 5, 2026 – 02:10 AM UTC

PDB ID : 9E23 / pdb_00009e23
EMDB ID : EMD-47430
Title : Cryo-EM structure of Pre-Chi dynein tail
Authors : Nguyen, K.H.V.; Kendrick, A.A.; Leschziner, A.E.
Deposited on : 2024-10-21
Resolution : 6.20 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 ⓘ 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.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

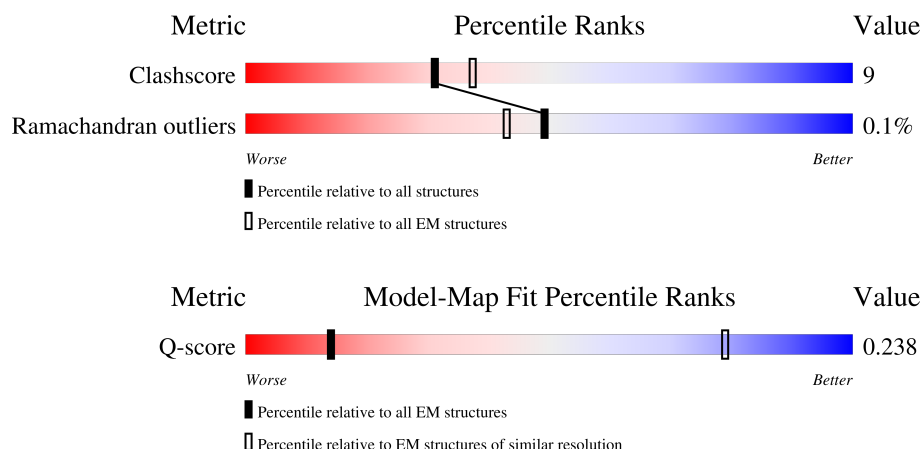
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 6.20 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.



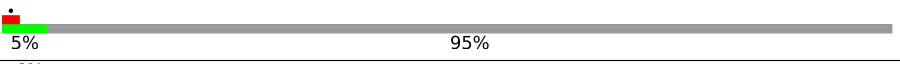
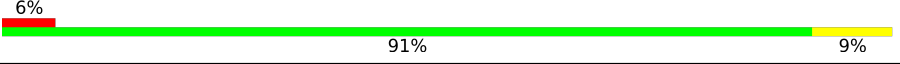




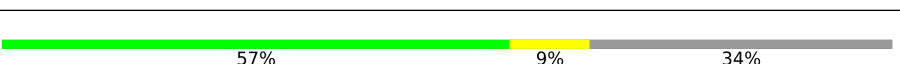
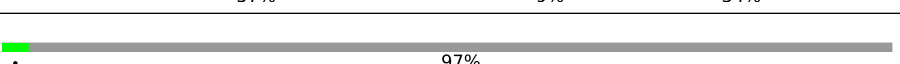
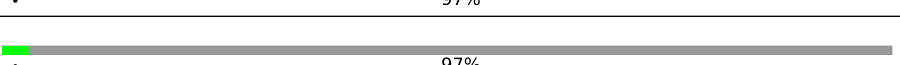
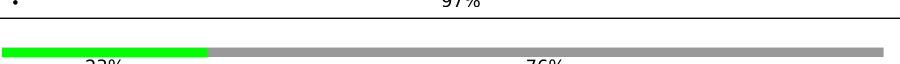

Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	537 (5.70 - 6.70)

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 $\leq 5\%$. 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	E	96	 84% 16%
1	F	96	 66% 34%
2	D	612	 48% 20% 32%
2	H	612	 57% 13% 30%
2	g	612	 5% 95%

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Mol	Chain	Length	Quality of chain
2	h	612	
3	d	89	
3	i	89	
4	k	113	
4	v	113	
5	B	492	
5	C	492	
6	A	4843	
6	G	4843	
6	e	4843	
6	f	4843	

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 21249 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 Dynein light chain roadblock-type 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	E	96	Total	C	N	O	0	0
			477	285	96	96		
1	F	96	Total	C	N	O	0	0
			477	285	96	96		

- Molecule 2 is a protein called Isoform 2C of Cytoplasmic dynein 1 intermediate chain 2.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	H	429	Total	C	N	O	0	0
			2118	1260	429	429		
2	g	31	Total	C	N	O	0	0
			154	92	31	31		
2	h	31	Total	C	N	O	0	0
			154	92	31	31		
2	D	416	Total	C	N	O	0	0
			2054	1222	416	416		

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	484	SER	THR	conflict	UNP Q13409
H	499	GLY	ASP	conflict	UNP Q13409
g	484	SER	THR	conflict	UNP Q13409
g	499	GLY	ASP	conflict	UNP Q13409
h	484	SER	THR	conflict	UNP Q13409
h	499	GLY	ASP	conflict	UNP Q13409
D	484	SER	THR	conflict	UNP Q13409
D	499	GLY	ASP	conflict	UNP Q13409

- Molecule 3 is a protein called Dynein light chain 1, cytoplasmic.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	d	89	Total	C	N	O	0	0
			441	263	89	89		
3	i	89	Total	C	N	O	0	0
			441	263	89	89		

- Molecule 4 is a protein called Dynein light chain Tctex-type 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	k	101	Total	C	N	O	0	0
			498	296	101	101		
4	v	101	Total	C	N	O	0	0
			498	296	101	101		

- Molecule 5 is a protein called Cytoplasmic dynein 1 light intermediate chain 2.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	B	324	Total	C	N	O	0	0
			1604	956	324	324		
5	C	324	Total	C	N	O	0	0
			1604	956	324	324		

- Molecule 6 is a protein called Cytoplasmic dynein 1 heavy chain 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	e	1152	Total	C	N	O	0	0
			4608	2304	1152	1152		
6	f	1151	Total	C	N	O	0	0
			4609	2307	1151	1151		
6	A	152	Total	C	N	O	0	0
			756	452	152	152		
6	G	152	Total	C	N	O	0	0
			756	452	152	152		

There are 792 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
e	-196	GLY	-	expression tag	UNP Q14204
e	-195	ASP	-	expression tag	UNP Q14204
e	-194	TYR	-	expression tag	UNP Q14204
e	-193	ASP	-	expression tag	UNP Q14204
e	-192	ILE	-	expression tag	UNP Q14204
e	-191	PRO	-	expression tag	UNP Q14204
e	-190	THR	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
e	-189	THR	-	expression tag	UNP Q14204
e	-188	GLU	-	expression tag	UNP Q14204
e	-187	ASN	-	expression tag	UNP Q14204
e	-186	LEU	-	expression tag	UNP Q14204
e	-185	TYR	-	expression tag	UNP Q14204
e	-184	PHE	-	expression tag	UNP Q14204
e	-183	GLN	-	expression tag	UNP Q14204
e	-182	GLY	-	expression tag	UNP Q14204
e	-181	ASP	-	expression tag	UNP Q14204
e	-180	LYS	-	expression tag	UNP Q14204
e	-179	ASP	-	expression tag	UNP Q14204
e	-178	CYS	-	expression tag	UNP Q14204
e	-177	GLU	-	expression tag	UNP Q14204
e	-176	MET	-	expression tag	UNP Q14204
e	-175	LYS	-	expression tag	UNP Q14204
e	-174	ARG	-	expression tag	UNP Q14204
e	-173	THR	-	expression tag	UNP Q14204
e	-172	THR	-	expression tag	UNP Q14204
e	-171	LEU	-	expression tag	UNP Q14204
e	-170	ASP	-	expression tag	UNP Q14204
e	-169	SER	-	expression tag	UNP Q14204
e	-168	PRO	-	expression tag	UNP Q14204
e	-167	LEU	-	expression tag	UNP Q14204
e	-166	GLY	-	expression tag	UNP Q14204
e	-165	LYS	-	expression tag	UNP Q14204
e	-164	LEU	-	expression tag	UNP Q14204
e	-163	GLU	-	expression tag	UNP Q14204
e	-162	LEU	-	expression tag	UNP Q14204
e	-161	SER	-	expression tag	UNP Q14204
e	-160	GLY	-	expression tag	UNP Q14204
e	-159	CYS	-	expression tag	UNP Q14204
e	-158	GLU	-	expression tag	UNP Q14204
e	-157	GLN	-	expression tag	UNP Q14204
e	-156	GLY	-	expression tag	UNP Q14204
e	-155	LEU	-	expression tag	UNP Q14204
e	-154	HIS	-	expression tag	UNP Q14204
e	-153	ARG	-	expression tag	UNP Q14204
e	-152	ILE	-	expression tag	UNP Q14204
e	-151	ILE	-	expression tag	UNP Q14204
e	-150	PHE	-	expression tag	UNP Q14204
e	-149	LEU	-	expression tag	UNP Q14204
e	-148	GLY	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
e	-147	LYS	-	expression tag	UNP Q14204
e	-146	GLY	-	expression tag	UNP Q14204
e	-145	THR	-	expression tag	UNP Q14204
e	-144	SER	-	expression tag	UNP Q14204
e	-143	ALA	-	expression tag	UNP Q14204
e	-142	ALA	-	expression tag	UNP Q14204
e	-141	ASP	-	expression tag	UNP Q14204
e	-140	ALA	-	expression tag	UNP Q14204
e	-139	VAL	-	expression tag	UNP Q14204
e	-138	GLU	-	expression tag	UNP Q14204
e	-137	VAL	-	expression tag	UNP Q14204
e	-136	PRO	-	expression tag	UNP Q14204
e	-135	ALA	-	expression tag	UNP Q14204
e	-134	PRO	-	expression tag	UNP Q14204
e	-133	ALA	-	expression tag	UNP Q14204
e	-132	ALA	-	expression tag	UNP Q14204
e	-131	VAL	-	expression tag	UNP Q14204
e	-130	LEU	-	expression tag	UNP Q14204
e	-129	GLY	-	expression tag	UNP Q14204
e	-128	GLY	-	expression tag	UNP Q14204
e	-127	PRO	-	expression tag	UNP Q14204
e	-126	GLU	-	expression tag	UNP Q14204
e	-125	PRO	-	expression tag	UNP Q14204
e	-124	LEU	-	expression tag	UNP Q14204
e	-123	MET	-	expression tag	UNP Q14204
e	-122	GLN	-	expression tag	UNP Q14204
e	-121	ALA	-	expression tag	UNP Q14204
e	-120	THR	-	expression tag	UNP Q14204
e	-119	ALA	-	expression tag	UNP Q14204
e	-118	TRP	-	expression tag	UNP Q14204
e	-117	LEU	-	expression tag	UNP Q14204
e	-116	ASN	-	expression tag	UNP Q14204
e	-115	ALA	-	expression tag	UNP Q14204
e	-114	TYR	-	expression tag	UNP Q14204
e	-113	PHE	-	expression tag	UNP Q14204
e	-112	HIS	-	expression tag	UNP Q14204
e	-111	GLN	-	expression tag	UNP Q14204
e	-110	PRO	-	expression tag	UNP Q14204
e	-109	GLU	-	expression tag	UNP Q14204
e	-108	ALA	-	expression tag	UNP Q14204
e	-107	ILE	-	expression tag	UNP Q14204
e	-106	GLU	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
e	-105	GLU	-	expression tag	UNP Q14204
e	-104	PHE	-	expression tag	UNP Q14204
e	-103	PRO	-	expression tag	UNP Q14204
e	-102	VAL	-	expression tag	UNP Q14204
e	-101	PRO	-	expression tag	UNP Q14204
e	-100	ALA	-	expression tag	UNP Q14204
e	-99	LEU	-	expression tag	UNP Q14204
e	-98	HIS	-	expression tag	UNP Q14204
e	-97	HIS	-	expression tag	UNP Q14204
e	-96	PRO	-	expression tag	UNP Q14204
e	-95	VAL	-	expression tag	UNP Q14204
e	-94	PHE	-	expression tag	UNP Q14204
e	-93	GLN	-	expression tag	UNP Q14204
e	-92	GLN	-	expression tag	UNP Q14204
e	-91	GLU	-	expression tag	UNP Q14204
e	-90	SER	-	expression tag	UNP Q14204
e	-89	PHE	-	expression tag	UNP Q14204
e	-88	THR	-	expression tag	UNP Q14204
e	-87	ARG	-	expression tag	UNP Q14204
e	-86	GLN	-	expression tag	UNP Q14204
e	-85	VAL	-	expression tag	UNP Q14204
e	-84	LEU	-	expression tag	UNP Q14204
e	-83	TRP	-	expression tag	UNP Q14204
e	-82	LYS	-	expression tag	UNP Q14204
e	-81	LEU	-	expression tag	UNP Q14204
e	-80	LEU	-	expression tag	UNP Q14204
e	-79	LYS	-	expression tag	UNP Q14204
e	-78	VAL	-	expression tag	UNP Q14204
e	-77	VAL	-	expression tag	UNP Q14204
e	-76	LYS	-	expression tag	UNP Q14204
e	-75	PHE	-	expression tag	UNP Q14204
e	-74	GLY	-	expression tag	UNP Q14204
e	-73	GLU	-	expression tag	UNP Q14204
e	-72	VAL	-	expression tag	UNP Q14204
e	-71	ILE	-	expression tag	UNP Q14204
e	-70	SER	-	expression tag	UNP Q14204
e	-69	TYR	-	expression tag	UNP Q14204
e	-68	SER	-	expression tag	UNP Q14204
e	-67	HIS	-	expression tag	UNP Q14204
e	-66	LEU	-	expression tag	UNP Q14204
e	-65	ALA	-	expression tag	UNP Q14204
e	-64	ALA	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
e	-63	LEU	-	expression tag	UNP Q14204
e	-62	ALA	-	expression tag	UNP Q14204
e	-61	GLY	-	expression tag	UNP Q14204
e	-60	ASN	-	expression tag	UNP Q14204
e	-59	PRO	-	expression tag	UNP Q14204
e	-58	ALA	-	expression tag	UNP Q14204
e	-57	ALA	-	expression tag	UNP Q14204
e	-56	THR	-	expression tag	UNP Q14204
e	-55	ALA	-	expression tag	UNP Q14204
e	-54	ALA	-	expression tag	UNP Q14204
e	-53	VAL	-	expression tag	UNP Q14204
e	-52	LYS	-	expression tag	UNP Q14204
e	-51	THR	-	expression tag	UNP Q14204
e	-50	ALA	-	expression tag	UNP Q14204
e	-49	LEU	-	expression tag	UNP Q14204
e	-48	SER	-	expression tag	UNP Q14204
e	-47	GLY	-	expression tag	UNP Q14204
e	-46	ASN	-	expression tag	UNP Q14204
e	-45	PRO	-	expression tag	UNP Q14204
e	-44	VAL	-	expression tag	UNP Q14204
e	-43	PRO	-	expression tag	UNP Q14204
e	-42	ILE	-	expression tag	UNP Q14204
e	-41	LEU	-	expression tag	UNP Q14204
e	-40	ILE	-	expression tag	UNP Q14204
e	-39	PRO	-	expression tag	UNP Q14204
e	-38	CYS	-	expression tag	UNP Q14204
e	-37	HIS	-	expression tag	UNP Q14204
e	-36	ARG	-	expression tag	UNP Q14204
e	-35	VAL	-	expression tag	UNP Q14204
e	-34	VAL	-	expression tag	UNP Q14204
e	-33	GLN	-	expression tag	UNP Q14204
e	-32	GLY	-	expression tag	UNP Q14204
e	-31	ASP	-	expression tag	UNP Q14204
e	-30	LEU	-	expression tag	UNP Q14204
e	-29	ASP	-	expression tag	UNP Q14204
e	-28	VAL	-	expression tag	UNP Q14204
e	-27	GLY	-	expression tag	UNP Q14204
e	-26	GLY	-	expression tag	UNP Q14204
e	-25	TYR	-	expression tag	UNP Q14204
e	-24	GLU	-	expression tag	UNP Q14204
e	-23	GLY	-	expression tag	UNP Q14204
e	-22	GLY	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
e	-21	LEU	-	expression tag	UNP Q14204
e	-20	ALA	-	expression tag	UNP Q14204
e	-19	VAL	-	expression tag	UNP Q14204
e	-18	LYS	-	expression tag	UNP Q14204
e	-17	GLU	-	expression tag	UNP Q14204
e	-16	TRP	-	expression tag	UNP Q14204
e	-15	LEU	-	expression tag	UNP Q14204
e	-14	LEU	-	expression tag	UNP Q14204
e	-13	ALA	-	expression tag	UNP Q14204
e	-12	HIS	-	expression tag	UNP Q14204
e	-11	GLU	-	expression tag	UNP Q14204
e	-10	GLY	-	expression tag	UNP Q14204
e	-9	HIS	-	expression tag	UNP Q14204
e	-8	ARG	-	expression tag	UNP Q14204
e	-7	LEU	-	expression tag	UNP Q14204
e	-6	GLY	-	expression tag	UNP Q14204
e	-5	LYS	-	expression tag	UNP Q14204
e	-4	PRO	-	expression tag	UNP Q14204
e	-3	GLY	-	expression tag	UNP Q14204
e	-2	LEU	-	expression tag	UNP Q14204
e	-1	GLY	-	expression tag	UNP Q14204
e	0	GLY	-	expression tag	UNP Q14204
e	1	SER	-	expression tag	UNP Q14204
f	-196	GLY	-	expression tag	UNP Q14204
f	-195	ASP	-	expression tag	UNP Q14204
f	-194	TYR	-	expression tag	UNP Q14204
f	-193	ASP	-	expression tag	UNP Q14204
f	-192	ILE	-	expression tag	UNP Q14204
f	-191	PRO	-	expression tag	UNP Q14204
f	-190	THR	-	expression tag	UNP Q14204
f	-189	THR	-	expression tag	UNP Q14204
f	-188	GLU	-	expression tag	UNP Q14204
f	-187	ASN	-	expression tag	UNP Q14204
f	-186	LEU	-	expression tag	UNP Q14204
f	-185	TYR	-	expression tag	UNP Q14204
f	-184	PHE	-	expression tag	UNP Q14204
f	-183	GLN	-	expression tag	UNP Q14204
f	-182	GLY	-	expression tag	UNP Q14204
f	-181	ASP	-	expression tag	UNP Q14204
f	-180	LYS	-	expression tag	UNP Q14204
f	-179	ASP	-	expression tag	UNP Q14204
f	-178	CYS	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
f	-177	GLU	-	expression tag	UNP Q14204
f	-176	MET	-	expression tag	UNP Q14204
f	-175	LYS	-	expression tag	UNP Q14204
f	-174	ARG	-	expression tag	UNP Q14204
f	-173	THR	-	expression tag	UNP Q14204
f	-172	THR	-	expression tag	UNP Q14204
f	-171	LEU	-	expression tag	UNP Q14204
f	-170	ASP	-	expression tag	UNP Q14204
f	-169	SER	-	expression tag	UNP Q14204
f	-168	PRO	-	expression tag	UNP Q14204
f	-167	LEU	-	expression tag	UNP Q14204
f	-166	GLY	-	expression tag	UNP Q14204
f	-165	LYS	-	expression tag	UNP Q14204
f	-164	LEU	-	expression tag	UNP Q14204
f	-163	GLU	-	expression tag	UNP Q14204
f	-162	LEU	-	expression tag	UNP Q14204
f	-161	SER	-	expression tag	UNP Q14204
f	-160	GLY	-	expression tag	UNP Q14204
f	-159	CYS	-	expression tag	UNP Q14204
f	-158	GLU	-	expression tag	UNP Q14204
f	-157	GLN	-	expression tag	UNP Q14204
f	-156	GLY	-	expression tag	UNP Q14204
f	-155	LEU	-	expression tag	UNP Q14204
f	-154	HIS	-	expression tag	UNP Q14204
f	-153	ARG	-	expression tag	UNP Q14204
f	-152	ILE	-	expression tag	UNP Q14204
f	-151	ILE	-	expression tag	UNP Q14204
f	-150	PHE	-	expression tag	UNP Q14204
f	-149	LEU	-	expression tag	UNP Q14204
f	-148	GLY	-	expression tag	UNP Q14204
f	-147	LYS	-	expression tag	UNP Q14204
f	-146	GLY	-	expression tag	UNP Q14204
f	-145	THR	-	expression tag	UNP Q14204
f	-144	SER	-	expression tag	UNP Q14204
f	-143	ALA	-	expression tag	UNP Q14204
f	-142	ALA	-	expression tag	UNP Q14204
f	-141	ASP	-	expression tag	UNP Q14204
f	-140	ALA	-	expression tag	UNP Q14204
f	-139	VAL	-	expression tag	UNP Q14204
f	-138	GLU	-	expression tag	UNP Q14204
f	-137	VAL	-	expression tag	UNP Q14204
f	-136	PRO	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
f	-135	ALA	-	expression tag	UNP Q14204
f	-134	PRO	-	expression tag	UNP Q14204
f	-133	ALA	-	expression tag	UNP Q14204
f	-132	ALA	-	expression tag	UNP Q14204
f	-131	VAL	-	expression tag	UNP Q14204
f	-130	LEU	-	expression tag	UNP Q14204
f	-129	GLY	-	expression tag	UNP Q14204
f	-128	GLY	-	expression tag	UNP Q14204
f	-127	PRO	-	expression tag	UNP Q14204
f	-126	GLU	-	expression tag	UNP Q14204
f	-125	PRO	-	expression tag	UNP Q14204
f	-124	LEU	-	expression tag	UNP Q14204
f	-123	MET	-	expression tag	UNP Q14204
f	-122	GLN	-	expression tag	UNP Q14204
f	-121	ALA	-	expression tag	UNP Q14204
f	-120	THR	-	expression tag	UNP Q14204
f	-119	ALA	-	expression tag	UNP Q14204
f	-118	TRP	-	expression tag	UNP Q14204
f	-117	LEU	-	expression tag	UNP Q14204
f	-116	ASN	-	expression tag	UNP Q14204
f	-115	ALA	-	expression tag	UNP Q14204
f	-114	TYR	-	expression tag	UNP Q14204
f	-113	PHE	-	expression tag	UNP Q14204
f	-112	HIS	-	expression tag	UNP Q14204
f	-111	GLN	-	expression tag	UNP Q14204
f	-110	PRO	-	expression tag	UNP Q14204
f	-109	GLU	-	expression tag	UNP Q14204
f	-108	ALA	-	expression tag	UNP Q14204
f	-107	ILE	-	expression tag	UNP Q14204
f	-106	GLU	-	expression tag	UNP Q14204
f	-105	GLU	-	expression tag	UNP Q14204
f	-104	PHE	-	expression tag	UNP Q14204
f	-103	PRO	-	expression tag	UNP Q14204
f	-102	VAL	-	expression tag	UNP Q14204
f	-101	PRO	-	expression tag	UNP Q14204
f	-100	ALA	-	expression tag	UNP Q14204
f	-99	LEU	-	expression tag	UNP Q14204
f	-98	HIS	-	expression tag	UNP Q14204
f	-97	HIS	-	expression tag	UNP Q14204
f	-96	PRO	-	expression tag	UNP Q14204
f	-95	VAL	-	expression tag	UNP Q14204
f	-94	PHE	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
f	-93	GLN	-	expression tag	UNP Q14204
f	-92	GLN	-	expression tag	UNP Q14204
f	-91	GLU	-	expression tag	UNP Q14204
f	-90	SER	-	expression tag	UNP Q14204
f	-89	PHE	-	expression tag	UNP Q14204
f	-88	THR	-	expression tag	UNP Q14204
f	-87	ARG	-	expression tag	UNP Q14204
f	-86	GLN	-	expression tag	UNP Q14204
f	-85	VAL	-	expression tag	UNP Q14204
f	-84	LEU	-	expression tag	UNP Q14204
f	-83	TRP	-	expression tag	UNP Q14204
f	-82	LYS	-	expression tag	UNP Q14204
f	-81	LEU	-	expression tag	UNP Q14204
f	-80	LEU	-	expression tag	UNP Q14204
f	-79	LYS	-	expression tag	UNP Q14204
f	-78	VAL	-	expression tag	UNP Q14204
f	-77	VAL	-	expression tag	UNP Q14204
f	-76	LYS	-	expression tag	UNP Q14204
f	-75	PHE	-	expression tag	UNP Q14204
f	-74	GLY	-	expression tag	UNP Q14204
f	-73	GLU	-	expression tag	UNP Q14204
f	-72	VAL	-	expression tag	UNP Q14204
f	-71	ILE	-	expression tag	UNP Q14204
f	-70	SER	-	expression tag	UNP Q14204
f	-69	TYR	-	expression tag	UNP Q14204
f	-68	SER	-	expression tag	UNP Q14204
f	-67	HIS	-	expression tag	UNP Q14204
f	-66	LEU	-	expression tag	UNP Q14204
f	-65	ALA	-	expression tag	UNP Q14204
f	-64	ALA	-	expression tag	UNP Q14204
f	-63	LEU	-	expression tag	UNP Q14204
f	-62	ALA	-	expression tag	UNP Q14204
f	-61	GLY	-	expression tag	UNP Q14204
f	-60	ASN	-	expression tag	UNP Q14204
f	-59	PRO	-	expression tag	UNP Q14204
f	-58	ALA	-	expression tag	UNP Q14204
f	-57	ALA	-	expression tag	UNP Q14204
f	-56	THR	-	expression tag	UNP Q14204
f	-55	ALA	-	expression tag	UNP Q14204
f	-54	ALA	-	expression tag	UNP Q14204
f	-53	VAL	-	expression tag	UNP Q14204
f	-52	LYS	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
f	-51	THR	-	expression tag	UNP Q14204
f	-50	ALA	-	expression tag	UNP Q14204
f	-49	LEU	-	expression tag	UNP Q14204
f	-48	SER	-	expression tag	UNP Q14204
f	-47	GLY	-	expression tag	UNP Q14204
f	-46	ASN	-	expression tag	UNP Q14204
f	-45	PRO	-	expression tag	UNP Q14204
f	-44	VAL	-	expression tag	UNP Q14204
f	-43	PRO	-	expression tag	UNP Q14204
f	-42	ILE	-	expression tag	UNP Q14204
f	-41	LEU	-	expression tag	UNP Q14204
f	-40	ILE	-	expression tag	UNP Q14204
f	-39	PRO	-	expression tag	UNP Q14204
f	-38	CYS	-	expression tag	UNP Q14204
f	-37	HIS	-	expression tag	UNP Q14204
f	-36	ARG	-	expression tag	UNP Q14204
f	-35	VAL	-	expression tag	UNP Q14204
f	-34	VAL	-	expression tag	UNP Q14204
f	-33	GLN	-	expression tag	UNP Q14204
f	-32	GLY	-	expression tag	UNP Q14204
f	-31	ASP	-	expression tag	UNP Q14204
f	-30	LEU	-	expression tag	UNP Q14204
f	-29	ASP	-	expression tag	UNP Q14204
f	-28	VAL	-	expression tag	UNP Q14204
f	-27	GLY	-	expression tag	UNP Q14204
f	-26	GLY	-	expression tag	UNP Q14204
f	-25	TYR	-	expression tag	UNP Q14204
f	-24	GLU	-	expression tag	UNP Q14204
f	-23	GLY	-	expression tag	UNP Q14204
f	-22	GLY	-	expression tag	UNP Q14204
f	-21	LEU	-	expression tag	UNP Q14204
f	-20	ALA	-	expression tag	UNP Q14204
f	-19	VAL	-	expression tag	UNP Q14204
f	-18	LYS	-	expression tag	UNP Q14204
f	-17	GLU	-	expression tag	UNP Q14204
f	-16	TRP	-	expression tag	UNP Q14204
f	-15	LEU	-	expression tag	UNP Q14204
f	-14	LEU	-	expression tag	UNP Q14204
f	-13	ALA	-	expression tag	UNP Q14204
f	-12	HIS	-	expression tag	UNP Q14204
f	-11	GLU	-	expression tag	UNP Q14204
f	-10	GLY	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
f	-9	HIS	-	expression tag	UNP Q14204
f	-8	ARG	-	expression tag	UNP Q14204
f	-7	LEU	-	expression tag	UNP Q14204
f	-6	GLY	-	expression tag	UNP Q14204
f	-5	LYS	-	expression tag	UNP Q14204
f	-4	PRO	-	expression tag	UNP Q14204
f	-3	GLY	-	expression tag	UNP Q14204
f	-2	LEU	-	expression tag	UNP Q14204
f	-1	GLY	-	expression tag	UNP Q14204
f	0	GLY	-	expression tag	UNP Q14204
f	1	SER	-	expression tag	UNP Q14204
A	-196	GLY	-	expression tag	UNP Q14204
A	-195	ASP	-	expression tag	UNP Q14204
A	-194	TYR	-	expression tag	UNP Q14204
A	-193	ASP	-	expression tag	UNP Q14204
A	-192	ILE	-	expression tag	UNP Q14204
A	-191	PRO	-	expression tag	UNP Q14204
A	-190	THR	-	expression tag	UNP Q14204
A	-189	THR	-	expression tag	UNP Q14204
A	-188	GLU	-	expression tag	UNP Q14204
A	-187	ASN	-	expression tag	UNP Q14204
A	-186	LEU	-	expression tag	UNP Q14204
A	-185	TYR	-	expression tag	UNP Q14204
A	-184	PHE	-	expression tag	UNP Q14204
A	-183	GLN	-	expression tag	UNP Q14204
A	-182	GLY	-	expression tag	UNP Q14204
A	-181	ASP	-	expression tag	UNP Q14204
A	-180	LYS	-	expression tag	UNP Q14204
A	-179	ASP	-	expression tag	UNP Q14204
A	-178	CYS	-	expression tag	UNP Q14204
A	-177	GLU	-	expression tag	UNP Q14204
A	-176	MET	-	expression tag	UNP Q14204
A	-175	LYS	-	expression tag	UNP Q14204
A	-174	ARG	-	expression tag	UNP Q14204
A	-173	THR	-	expression tag	UNP Q14204
A	-172	THR	-	expression tag	UNP Q14204
A	-171	LEU	-	expression tag	UNP Q14204
A	-170	ASP	-	expression tag	UNP Q14204
A	-169	SER	-	expression tag	UNP Q14204
A	-168	PRO	-	expression tag	UNP Q14204
A	-167	LEU	-	expression tag	UNP Q14204
A	-166	GLY	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-165	LYS	-	expression tag	UNP Q14204
A	-164	LEU	-	expression tag	UNP Q14204
A	-163	GLU	-	expression tag	UNP Q14204
A	-162	LEU	-	expression tag	UNP Q14204
A	-161	SER	-	expression tag	UNP Q14204
A	-160	GLY	-	expression tag	UNP Q14204
A	-159	CYS	-	expression tag	UNP Q14204
A	-158	GLU	-	expression tag	UNP Q14204
A	-157	GLN	-	expression tag	UNP Q14204
A	-156	GLY	-	expression tag	UNP Q14204
A	-155	LEU	-	expression tag	UNP Q14204
A	-154	HIS	-	expression tag	UNP Q14204
A	-153	ARG	-	expression tag	UNP Q14204
A	-152	ILE	-	expression tag	UNP Q14204
A	-151	ILE	-	expression tag	UNP Q14204
A	-150	PHE	-	expression tag	UNP Q14204
A	-149	LEU	-	expression tag	UNP Q14204
A	-148	GLY	-	expression tag	UNP Q14204
A	-147	LYS	-	expression tag	UNP Q14204
A	-146	GLY	-	expression tag	UNP Q14204
A	-145	THR	-	expression tag	UNP Q14204
A	-144	SER	-	expression tag	UNP Q14204
A	-143	ALA	-	expression tag	UNP Q14204
A	-142	ALA	-	expression tag	UNP Q14204
A	-141	ASP	-	expression tag	UNP Q14204
A	-140	ALA	-	expression tag	UNP Q14204
A	-139	VAL	-	expression tag	UNP Q14204
A	-138	GLU	-	expression tag	UNP Q14204
A	-137	VAL	-	expression tag	UNP Q14204
A	-136	PRO	-	expression tag	UNP Q14204
A	-135	ALA	-	expression tag	UNP Q14204
A	-134	PRO	-	expression tag	UNP Q14204
A	-133	ALA	-	expression tag	UNP Q14204
A	-132	ALA	-	expression tag	UNP Q14204
A	-131	VAL	-	expression tag	UNP Q14204
A	-130	LEU	-	expression tag	UNP Q14204
A	-129	GLY	-	expression tag	UNP Q14204
A	-128	GLY	-	expression tag	UNP Q14204
A	-127	PRO	-	expression tag	UNP Q14204
A	-126	GLU	-	expression tag	UNP Q14204
A	-125	PRO	-	expression tag	UNP Q14204
A	-124	LEU	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-123	MET	-	expression tag	UNP Q14204
A	-122	GLN	-	expression tag	UNP Q14204
A	-121	ALA	-	expression tag	UNP Q14204
A	-120	THR	-	expression tag	UNP Q14204
A	-119	ALA	-	expression tag	UNP Q14204
A	-118	TRP	-	expression tag	UNP Q14204
A	-117	LEU	-	expression tag	UNP Q14204
A	-116	ASN	-	expression tag	UNP Q14204
A	-115	ALA	-	expression tag	UNP Q14204
A	-114	TYR	-	expression tag	UNP Q14204
A	-113	PHE	-	expression tag	UNP Q14204
A	-112	HIS	-	expression tag	UNP Q14204
A	-111	GLN	-	expression tag	UNP Q14204
A	-110	PRO	-	expression tag	UNP Q14204
A	-109	GLU	-	expression tag	UNP Q14204
A	-108	ALA	-	expression tag	UNP Q14204
A	-107	ILE	-	expression tag	UNP Q14204
A	-106	GLU	-	expression tag	UNP Q14204
A	-105	GLU	-	expression tag	UNP Q14204
A	-104	PHE	-	expression tag	UNP Q14204
A	-103	PRO	-	expression tag	UNP Q14204
A	-102	VAL	-	expression tag	UNP Q14204
A	-101	PRO	-	expression tag	UNP Q14204
A	-100	ALA	-	expression tag	UNP Q14204
A	-99	LEU	-	expression tag	UNP Q14204
A	-98	HIS	-	expression tag	UNP Q14204
A	-97	HIS	-	expression tag	UNP Q14204
A	-96	PRO	-	expression tag	UNP Q14204
A	-95	VAL	-	expression tag	UNP Q14204
A	-94	PHE	-	expression tag	UNP Q14204
A	-93	GLN	-	expression tag	UNP Q14204
A	-92	GLN	-	expression tag	UNP Q14204
A	-91	GLU	-	expression tag	UNP Q14204
A	-90	SER	-	expression tag	UNP Q14204
A	-89	PHE	-	expression tag	UNP Q14204
A	-88	THR	-	expression tag	UNP Q14204
A	-87	ARG	-	expression tag	UNP Q14204
A	-86	GLN	-	expression tag	UNP Q14204
A	-85	VAL	-	expression tag	UNP Q14204
A	-84	LEU	-	expression tag	UNP Q14204
A	-83	TRP	-	expression tag	UNP Q14204
A	-82	LYS	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-81	LEU	-	expression tag	UNP Q14204
A	-80	LEU	-	expression tag	UNP Q14204
A	-79	LYS	-	expression tag	UNP Q14204
A	-78	VAL	-	expression tag	UNP Q14204
A	-77	VAL	-	expression tag	UNP Q14204
A	-76	LYS	-	expression tag	UNP Q14204
A	-75	PHE	-	expression tag	UNP Q14204
A	-74	GLY	-	expression tag	UNP Q14204
A	-73	GLU	-	expression tag	UNP Q14204
A	-72	VAL	-	expression tag	UNP Q14204
A	-71	ILE	-	expression tag	UNP Q14204
A	-70	SER	-	expression tag	UNP Q14204
A	-69	TYR	-	expression tag	UNP Q14204
A	-68	SER	-	expression tag	UNP Q14204
A	-67	HIS	-	expression tag	UNP Q14204
A	-66	LEU	-	expression tag	UNP Q14204
A	-65	ALA	-	expression tag	UNP Q14204
A	-64	ALA	-	expression tag	UNP Q14204
A	-63	LEU	-	expression tag	UNP Q14204
A	-62	ALA	-	expression tag	UNP Q14204
A	-61	GLY	-	expression tag	UNP Q14204
A	-60	ASN	-	expression tag	UNP Q14204
A	-59	PRO	-	expression tag	UNP Q14204
A	-58	ALA	-	expression tag	UNP Q14204
A	-57	ALA	-	expression tag	UNP Q14204
A	-56	THR	-	expression tag	UNP Q14204
A	-55	ALA	-	expression tag	UNP Q14204
A	-54	ALA	-	expression tag	UNP Q14204
A	-53	VAL	-	expression tag	UNP Q14204
A	-52	LYS	-	expression tag	UNP Q14204
A	-51	THR	-	expression tag	UNP Q14204
A	-50	ALA	-	expression tag	UNP Q14204
A	-49	LEU	-	expression tag	UNP Q14204
A	-48	SER	-	expression tag	UNP Q14204
A	-47	GLY	-	expression tag	UNP Q14204
A	-46	ASN	-	expression tag	UNP Q14204
A	-45	PRO	-	expression tag	UNP Q14204
A	-44	VAL	-	expression tag	UNP Q14204
A	-43	PRO	-	expression tag	UNP Q14204
A	-42	ILE	-	expression tag	UNP Q14204
A	-41	LEU	-	expression tag	UNP Q14204
A	-40	ILE	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-39	PRO	-	expression tag	UNP Q14204
A	-38	CYS	-	expression tag	UNP Q14204
A	-37	HIS	-	expression tag	UNP Q14204
A	-36	ARG	-	expression tag	UNP Q14204
A	-35	VAL	-	expression tag	UNP Q14204
A	-34	VAL	-	expression tag	UNP Q14204
A	-33	GLN	-	expression tag	UNP Q14204
A	-32	GLY	-	expression tag	UNP Q14204
A	-31	ASP	-	expression tag	UNP Q14204
A	-30	LEU	-	expression tag	UNP Q14204
A	-29	ASP	-	expression tag	UNP Q14204
A	-28	VAL	-	expression tag	UNP Q14204
A	-27	GLY	-	expression tag	UNP Q14204
A	-26	GLY	-	expression tag	UNP Q14204
A	-25	TYR	-	expression tag	UNP Q14204
A	-24	GLU	-	expression tag	UNP Q14204
A	-23	GLY	-	expression tag	UNP Q14204
A	-22	GLY	-	expression tag	UNP Q14204
A	-21	LEU	-	expression tag	UNP Q14204
A	-20	ALA	-	expression tag	UNP Q14204
A	-19	VAL	-	expression tag	UNP Q14204
A	-18	LYS	-	expression tag	UNP Q14204
A	-17	GLU	-	expression tag	UNP Q14204
A	-16	TRP	-	expression tag	UNP Q14204
A	-15	LEU	-	expression tag	UNP Q14204
A	-14	LEU	-	expression tag	UNP Q14204
A	-13	ALA	-	expression tag	UNP Q14204
A	-12	HIS	-	expression tag	UNP Q14204
A	-11	GLU	-	expression tag	UNP Q14204
A	-10	GLY	-	expression tag	UNP Q14204
A	-9	HIS	-	expression tag	UNP Q14204
A	-8	ARG	-	expression tag	UNP Q14204
A	-7	LEU	-	expression tag	UNP Q14204
A	-6	GLY	-	expression tag	UNP Q14204
A	-5	LYS	-	expression tag	UNP Q14204
A	-4	PRO	-	expression tag	UNP Q14204
A	-3	GLY	-	expression tag	UNP Q14204
A	-2	LEU	-	expression tag	UNP Q14204
A	-1	GLY	-	expression tag	UNP Q14204
A	0	GLY	-	expression tag	UNP Q14204
A	1	SER	-	expression tag	UNP Q14204
G	-196	GLY	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
G	-195	ASP	-	expression tag	UNP Q14204
G	-194	TYR	-	expression tag	UNP Q14204
G	-193	ASP	-	expression tag	UNP Q14204
G	-192	ILE	-	expression tag	UNP Q14204
G	-191	PRO	-	expression tag	UNP Q14204
G	-190	THR	-	expression tag	UNP Q14204
G	-189	THR	-	expression tag	UNP Q14204
G	-188	GLU	-	expression tag	UNP Q14204
G	-187	ASN	-	expression tag	UNP Q14204
G	-186	LEU	-	expression tag	UNP Q14204
G	-185	TYR	-	expression tag	UNP Q14204
G	-184	PHE	-	expression tag	UNP Q14204
G	-183	GLN	-	expression tag	UNP Q14204
G	-182	GLY	-	expression tag	UNP Q14204
G	-181	ASP	-	expression tag	UNP Q14204
G	-180	LYS	-	expression tag	UNP Q14204
G	-179	ASP	-	expression tag	UNP Q14204
G	-178	CYS	-	expression tag	UNP Q14204
G	-177	GLU	-	expression tag	UNP Q14204
G	-176	MET	-	expression tag	UNP Q14204
G	-175	LYS	-	expression tag	UNP Q14204
G	-174	ARG	-	expression tag	UNP Q14204
G	-173	THR	-	expression tag	UNP Q14204
G	-172	THR	-	expression tag	UNP Q14204
G	-171	LEU	-	expression tag	UNP Q14204
G	-170	ASP	-	expression tag	UNP Q14204
G	-169	SER	-	expression tag	UNP Q14204
G	-168	PRO	-	expression tag	UNP Q14204
G	-167	LEU	-	expression tag	UNP Q14204
G	-166	GLY	-	expression tag	UNP Q14204
G	-165	LYS	-	expression tag	UNP Q14204
G	-164	LEU	-	expression tag	UNP Q14204
G	-163	GLU	-	expression tag	UNP Q14204
G	-162	LEU	-	expression tag	UNP Q14204
G	-161	SER	-	expression tag	UNP Q14204
G	-160	GLY	-	expression tag	UNP Q14204
G	-159	CYS	-	expression tag	UNP Q14204
G	-158	GLU	-	expression tag	UNP Q14204
G	-157	GLN	-	expression tag	UNP Q14204
G	-156	GLY	-	expression tag	UNP Q14204
G	-155	LEU	-	expression tag	UNP Q14204
G	-154	HIS	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
G	-153	ARG	-	expression tag	UNP Q14204
G	-152	ILE	-	expression tag	UNP Q14204
G	-151	ILE	-	expression tag	UNP Q14204
G	-150	PHE	-	expression tag	UNP Q14204
G	-149	LEU	-	expression tag	UNP Q14204
G	-148	GLY	-	expression tag	UNP Q14204
G	-147	LYS	-	expression tag	UNP Q14204
G	-146	GLY	-	expression tag	UNP Q14204
G	-145	THR	-	expression tag	UNP Q14204
G	-144	SER	-	expression tag	UNP Q14204
G	-143	ALA	-	expression tag	UNP Q14204
G	-142	ALA	-	expression tag	UNP Q14204
G	-141	ASP	-	expression tag	UNP Q14204
G	-140	ALA	-	expression tag	UNP Q14204
G	-139	VAL	-	expression tag	UNP Q14204
G	-138	GLU	-	expression tag	UNP Q14204
G	-137	VAL	-	expression tag	UNP Q14204
G	-136	PRO	-	expression tag	UNP Q14204
G	-135	ALA	-	expression tag	UNP Q14204
G	-134	PRO	-	expression tag	UNP Q14204
G	-133	ALA	-	expression tag	UNP Q14204
G	-132	ALA	-	expression tag	UNP Q14204
G	-131	VAL	-	expression tag	UNP Q14204
G	-130	LEU	-	expression tag	UNP Q14204
G	-129	GLY	-	expression tag	UNP Q14204
G	-128	GLY	-	expression tag	UNP Q14204
G	-127	PRO	-	expression tag	UNP Q14204
G	-126	GLU	-	expression tag	UNP Q14204
G	-125	PRO	-	expression tag	UNP Q14204
G	-124	LEU	-	expression tag	UNP Q14204
G	-123	MET	-	expression tag	UNP Q14204
G	-122	GLN	-	expression tag	UNP Q14204
G	-121	ALA	-	expression tag	UNP Q14204
G	-120	THR	-	expression tag	UNP Q14204
G	-119	ALA	-	expression tag	UNP Q14204
G	-118	TRP	-	expression tag	UNP Q14204
G	-117	LEU	-	expression tag	UNP Q14204
G	-116	ASN	-	expression tag	UNP Q14204
G	-115	ALA	-	expression tag	UNP Q14204
G	-114	TYR	-	expression tag	UNP Q14204
G	-113	PHE	-	expression tag	UNP Q14204
G	-112	HIS	-	expression tag	UNP Q14204

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Chain	Residue	Modelled	Actual	Comment	Reference
G	-111	GLN	-	expression tag	UNP Q14204
G	-110	PRO	-	expression tag	UNP Q14204
G	-109	GLU	-	expression tag	UNP Q14204
G	-108	ALA	-	expression tag	UNP Q14204
G	-107	ILE	-	expression tag	UNP Q14204
G	-106	GLU	-	expression tag	UNP Q14204
G	-105	GLU	-	expression tag	UNP Q14204
G	-104	PHE	-	expression tag	UNP Q14204
G	-103	PRO	-	expression tag	UNP Q14204
G	-102	VAL	-	expression tag	UNP Q14204
G	-101	PRO	-	expression tag	UNP Q14204
G	-100	ALA	-	expression tag	UNP Q14204
G	-99	LEU	-	expression tag	UNP Q14204
G	-98	HIS	-	expression tag	UNP Q14204
G	-97	HIS	-	expression tag	UNP Q14204
G	-96	PRO	-	expression tag	UNP Q14204
G	-95	VAL	-	expression tag	UNP Q14204
G	-94	PHE	-	expression tag	UNP Q14204
G	-93	GLN	-	expression tag	UNP Q14204
G	-92	GLN	-	expression tag	UNP Q14204
G	-91	GLU	-	expression tag	UNP Q14204
G	-90	SER	-	expression tag	UNP Q14204
G	-89	PHE	-	expression tag	UNP Q14204
G	-88	THR	-	expression tag	UNP Q14204
G	-87	ARG	-	expression tag	UNP Q14204
G	-86	GLN	-	expression tag	UNP Q14204
G	-85	VAL	-	expression tag	UNP Q14204
G	-84	LEU	-	expression tag	UNP Q14204
G	-83	TRP	-	expression tag	UNP Q14204
G	-82	LYS	-	expression tag	UNP Q14204
G	-81	LEU	-	expression tag	UNP Q14204
G	-80	LEU	-	expression tag	UNP Q14204
G	-79	LYS	-	expression tag	UNP Q14204
G	-78	VAL	-	expression tag	UNP Q14204
G	-77	VAL	-	expression tag	UNP Q14204
G	-76	LYS	-	expression tag	UNP Q14204
G	-75	PHE	-	expression tag	UNP Q14204
G	-74	GLY	-	expression tag	UNP Q14204
G	-73	GLU	-	expression tag	UNP Q14204
G	-72	VAL	-	expression tag	UNP Q14204
G	-71	ILE	-	expression tag	UNP Q14204
G	-70	SER	-	expression tag	UNP Q14204

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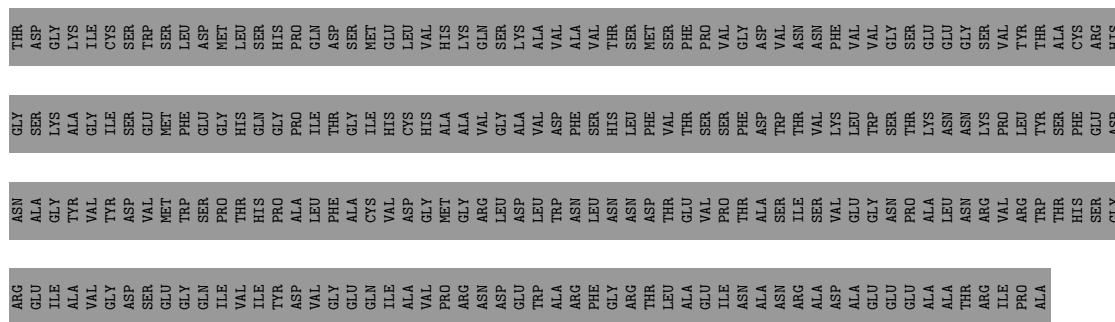
Chain	Residue	Modelled	Actual	Comment	Reference
G	-69	TYR	-	expression tag	UNP Q14204
G	-68	SER	-	expression tag	UNP Q14204
G	-67	HIS	-	expression tag	UNP Q14204
G	-66	LEU	-	expression tag	UNP Q14204
G	-65	ALA	-	expression tag	UNP Q14204
G	-64	ALA	-	expression tag	UNP Q14204
G	-63	LEU	-	expression tag	UNP Q14204
G	-62	ALA	-	expression tag	UNP Q14204
G	-61	GLY	-	expression tag	UNP Q14204
G	-60	ASN	-	expression tag	UNP Q14204
G	-59	PRO	-	expression tag	UNP Q14204
G	-58	ALA	-	expression tag	UNP Q14204
G	-57	ALA	-	expression tag	UNP Q14204
G	-56	THR	-	expression tag	UNP Q14204
G	-55	ALA	-	expression tag	UNP Q14204
G	-54	ALA	-	expression tag	UNP Q14204
G	-53	VAL	-	expression tag	UNP Q14204
G	-52	LYS	-	expression tag	UNP Q14204
G	-51	THR	-	expression tag	UNP Q14204
G	-50	ALA	-	expression tag	UNP Q14204
G	-49	LEU	-	expression tag	UNP Q14204
G	-48	SER	-	expression tag	UNP Q14204
G	-47	GLY	-	expression tag	UNP Q14204
G	-46	ASN	-	expression tag	UNP Q14204
G	-45	PRO	-	expression tag	UNP Q14204
G	-44	VAL	-	expression tag	UNP Q14204
G	-43	PRO	-	expression tag	UNP Q14204
G	-42	ILE	-	expression tag	UNP Q14204
G	-41	LEU	-	expression tag	UNP Q14204
G	-40	ILE	-	expression tag	UNP Q14204
G	-39	PRO	-	expression tag	UNP Q14204
G	-38	CYS	-	expression tag	UNP Q14204
G	-37	HIS	-	expression tag	UNP Q14204
G	-36	ARG	-	expression tag	UNP Q14204
G	-35	VAL	-	expression tag	UNP Q14204
G	-34	VAL	-	expression tag	UNP Q14204
G	-33	GLN	-	expression tag	UNP Q14204
G	-32	GLY	-	expression tag	UNP Q14204
G	-31	ASP	-	expression tag	UNP Q14204
G	-30	LEU	-	expression tag	UNP Q14204
G	-29	ASP	-	expression tag	UNP Q14204
G	-28	VAL	-	expression tag	UNP Q14204

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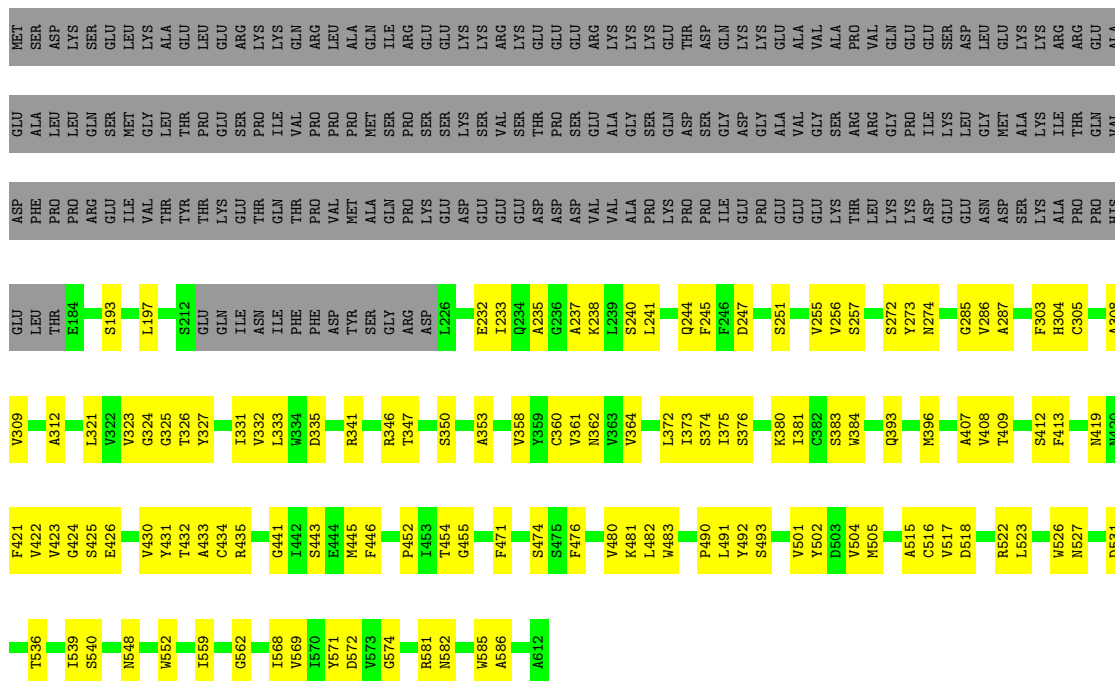
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Chain	Residue	Modelled	Actual	Comment	Reference
G	-27	GLY	-	expression tag	UNP Q14204
G	-26	GLY	-	expression tag	UNP Q14204
G	-25	TYR	-	expression tag	UNP Q14204
G	-24	GLU	-	expression tag	UNP Q14204
G	-23	GLY	-	expression tag	UNP Q14204
G	-22	GLY	-	expression tag	UNP Q14204
G	-21	LEU	-	expression tag	UNP Q14204
G	-20	ALA	-	expression tag	UNP Q14204
G	-19	VAL	-	expression tag	UNP Q14204
G	-18	LYS	-	expression tag	UNP Q14204
G	-17	GLU	-	expression tag	UNP Q14204
G	-16	TRP	-	expression tag	UNP Q14204
G	-15	LEU	-	expression tag	UNP Q14204
G	-14	LEU	-	expression tag	UNP Q14204
G	-13	ALA	-	expression tag	UNP Q14204
G	-12	HIS	-	expression tag	UNP Q14204
G	-11	GLU	-	expression tag	UNP Q14204
G	-10	GLY	-	expression tag	UNP Q14204
G	-9	HIS	-	expression tag	UNP Q14204
G	-8	ARG	-	expression tag	UNP Q14204
G	-7	LEU	-	expression tag	UNP Q14204
G	-6	GLY	-	expression tag	UNP Q14204
G	-5	LYS	-	expression tag	UNP Q14204
G	-4	PRO	-	expression tag	UNP Q14204
G	-3	GLY	-	expression tag	UNP Q14204
G	-2	LEU	-	expression tag	UNP Q14204
G	-1	GLY	-	expression tag	UNP Q14204
G	0	GLY	-	expression tag	UNP Q14204
G	1	SER	-	expression tag	UNP Q14204

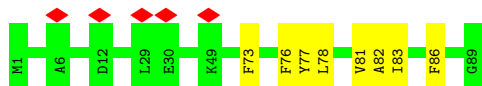
[illegible][illegible]



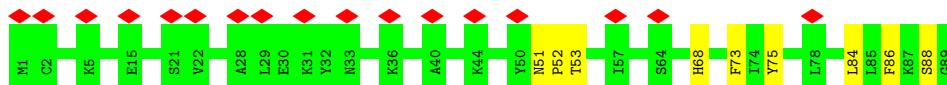
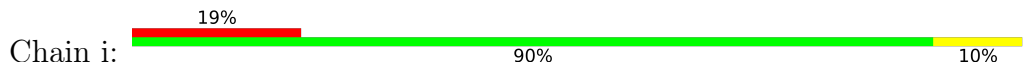
- Molecule 2: Isoform 2C of Cytoplasmic dynein 1 intermediate chain 2



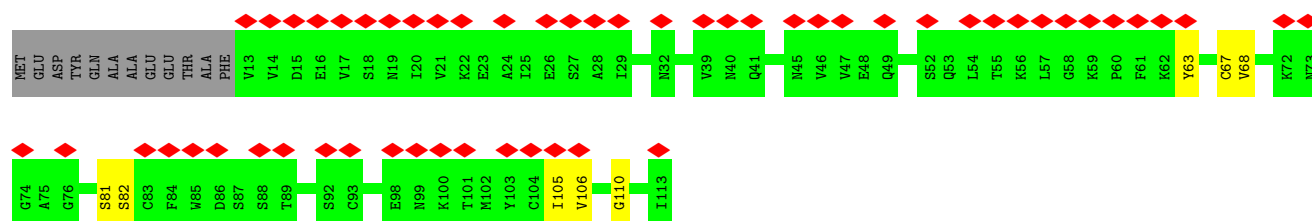
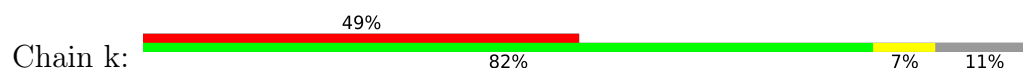
- Molecule 3: Dynein light chain 1, cytoplasmic



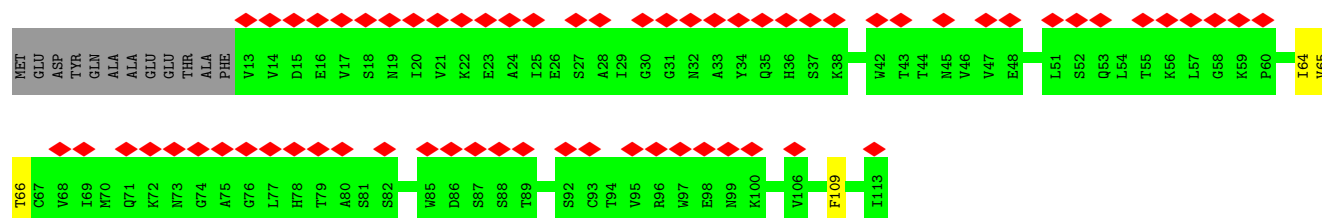
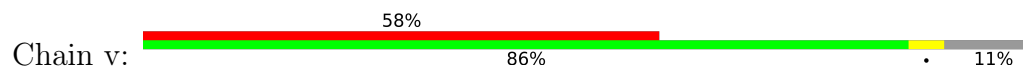
- Molecule 3: Dynein light chain 1, cytoplasmic



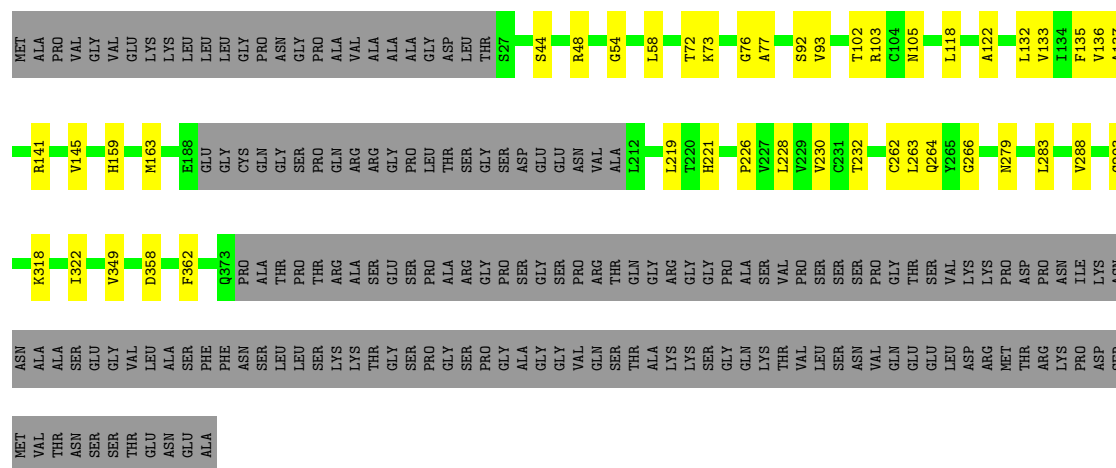
- Molecule 4: Dynein light chain Tctex-type 1



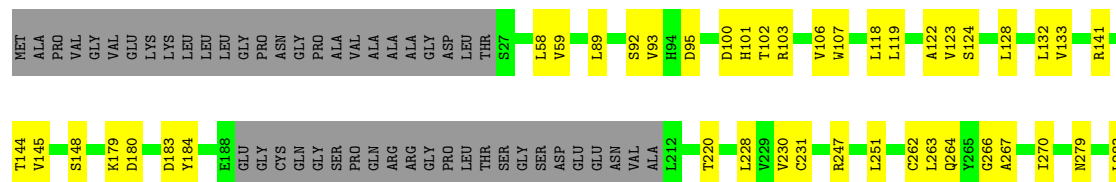
• Molecule 4: Dynein light chain Tctex-type 1



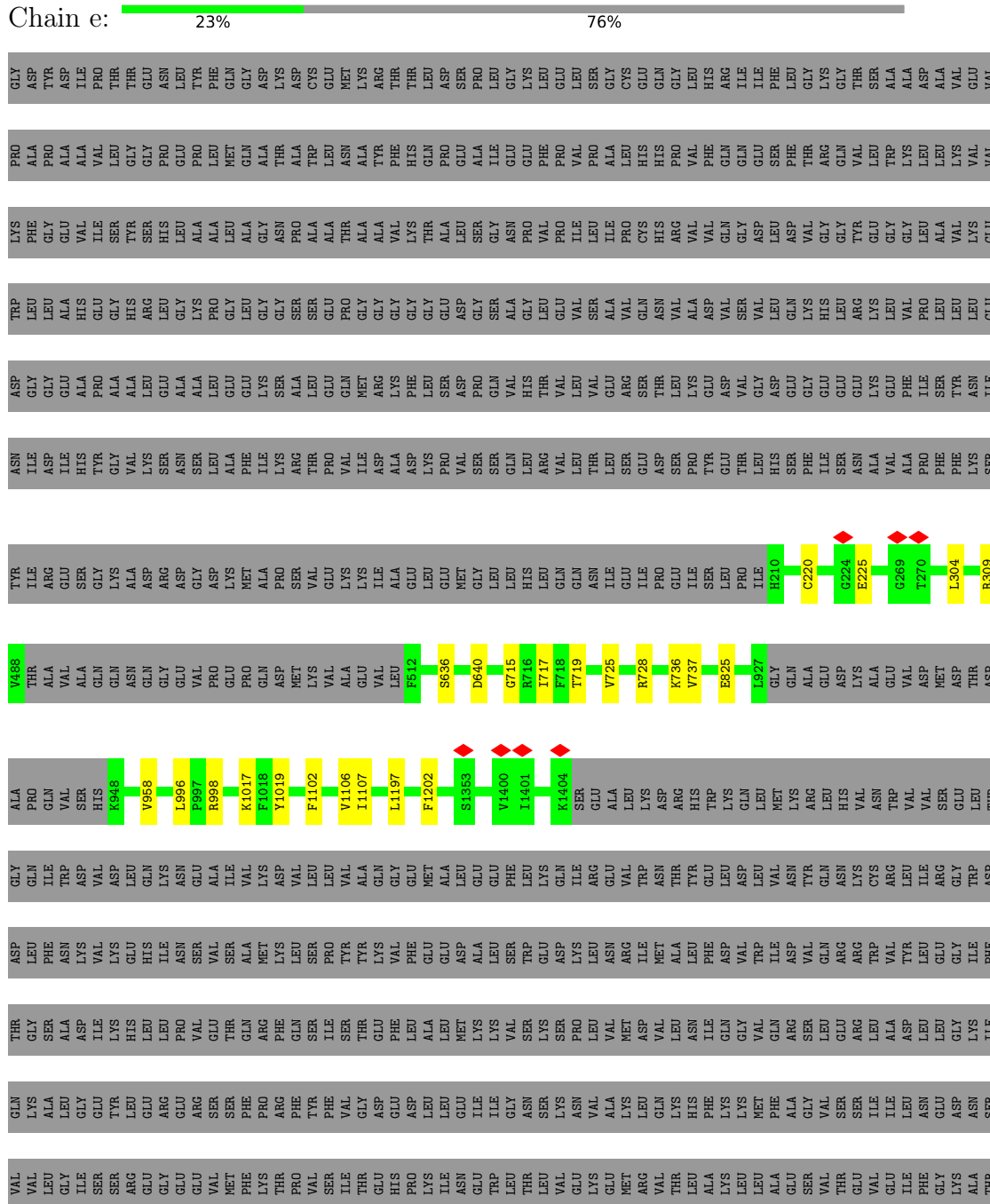
• Molecule 5: Cytoplasmic dynein 1 light intermediate chain 2



• Molecule 5: Cytoplasmic dynein 1 light intermediate chain 2



- Molecule 6: Cytoplasmic dynein 1 heavy chain 1







[illegible]

- Molecule 6: Cytoplasmic dynein 1 heavy chain 1



S722	V236	Tyr	Asn	Asp	Trp	Lys	Pro	Gly
T723	E237	Ile	Ile	Gly	Leu	Phe	Ala	Asp
V732	D238	Arg	Asp	Gly	Leu	Glu	Ala	Tyr
L733		Glu	Ile	Glu	His	Val	Ala	Asp
K734	M243	Ser	His	Ala	His	Glu	Val	Ile
L735	Q244	Gly	Tyr	Pro	Gly	Ser	Leu	Pro
K736		Lys	Val	Ala	His	Tyr	Gly	Thr
L753		Asp	Lys	Glu	Arg	Ser	Gly	Glu
F758	L301	Arg	Ser	Glu	Leu	His	Pro	Asn
L804	D302	Asp	Asn	Ala	Gly	Leu	Glu	Leu
W824		Gly	Ser	Ala	Lys	Ala	Pro	Tyr
E825	H306	Asp	Leu	Leu	Pro	Ala	Phe	Leu
S894	G307	Lys	Ala	Glu	Gly	Leu	Met	Gln
L927	K441	Ala	Ile	Lys	Gly	Gly	Ala	Asp
L927		Pro	Lys	Ser	Gly	Asn	Thr	Lys
Gln	M445	Ser	Arg	Ala	Ser	Pro	Ala	Asp
Ala	R451	Val	Thr	Leu	Ser	Ala	Ala	Cys
Ala	L452	Glu	Pro	Glu	Glu	Ala	Leu	Glu
P454	M453	Lys	Val	Val	Pro	Thr	Asn	Met
H456		Ile	Ile	Met	Gly	Ala	Ala	Lys
V488	A456	Glu	Asp	Arg	Gly	Val	Thr	Arg
Ala		Leu	Val	Lys	Gly	Val	Phe	Thr
Ala	Thr	Gly	Ser	Pro	Gly	Ser	His	Thr
Ala	Val	Leu	Ser	Gln	Ser	Gly	Ile	Leu
Asp	Val	Leu	Gln	Val	Ala	Gly	Glu	Gly
Met	Ala	His	Gln	His	Pro	Pro	Leu	Lys
Asp	Gln	Leu	Arg	Thr	Leu	Val	Phe	Leu
Thr	Gln	Gln	Val	Thr	Glu	Ile	Val	Glu
Asp	Asn	Asn	Leu	Leu	Val	Ile	Val	Leu
Ala	Gln	Gln	Thr	Val	Ser	Leu	Pro	Ser
Pro	Gly	Gly	Asp	Val	Val	Leu	Pro	Leu
Gln	Gly	Ile	Leu	Glu	Ala	Ile	Ala	Gly
Val	Val	Glu	Ser	Arg	Val	Pro	Phe	Cys
Ser	Pro	Ile	Glu	Ser	Val	Gln	His	Gly
His	Pro	Pro	Ser	Thr	Val	Arg	Gln	Gly
K848	Pro	Ile	Pro	Lys	Ala	Val	Val	Leu
E961	Asp	Ser	Tyr	Glu	Asp	Val	Phe	His
L962	Met	Leu	Glu	Asp	Val	Gln	Gln	Leu
R963	Lys	Pro	Thr	Val	Ser	Gly	Gln	Ile
Y970	Val	Val	Leu	Gly	Val	Leu	Leu	Phe
L971	Val	Val	His	Asp	Leu	Leu	Ser	Leu
N972	Glu	Glu	Ser	Glu	Lys	Val	Thr	Gly
R998	Leu	Leu	Ser	Glu	Gln	Asp	Arg	Ser
E1016	F512	Ala	Ala	Leu	His	Val	Leu	Leu
L1197		Glu	Glu	Glu	Ile	Val	Thr	Gly
R1201	A517	Val	Ile	Glu	Lys	Gly	Gln	Lys
F1202	G715	Leu	Ser	Asn	Arg	Tyr	Val	Gly
	W717	Thr	Phe	Thr	Lys	Gly	Trp	Ala
		Ser	Lys	Asn	Glu	Val	Lys	Val
		Ser	Ser	Ile	Leu	Gln	Val	Glu





[illegible]

- Molecule 6: Cytoplasmic dynein 1 heavy chain 1

Chain A:  97%

[illegible]

ASP	GLY	GLY	GLY	GLY	GLY	LYS	E97	S115	L116	A117	F118	I119	K120	L135	F136	V137	L138	T139	L140	F152	A156	S168	GLY	LYS	ALA	ASP	ARG	ASP	GLY	LYS	GLY	ASP	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY
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[illegible]

- Molecule 6: Cytoplasmic dynein 1 heavy chain 1

Chain G:  97%

[illegible]









4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	12517	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	55	Depositor
Minimum defocus (nm)	610	Depositor
Maximum defocus (nm)	3250	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.431	Depositor
Minimum map value	-0.194	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.014	Depositor
Recommended contour level	0.0339	Depositor
Map size (Å)	388.96, 388.96, 388.96	wwPDB
Map dimensions	416, 416, 416	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.935, 0.935, 0.935	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	E	0.15	0/476	0.35	0/663
1	F	0.21	0/476	0.40	0/663
2	D	0.18	0/2052	0.36	0/2854
2	H	0.19	0/2117	0.39	0/2946
2	g	0.09	0/153	0.21	0/212
2	h	0.13	0/153	0.32	0/212
3	d	0.12	0/440	0.37	0/612
3	i	0.10	0/440	0.28	0/612
4	k	0.09	0/497	0.23	0/690
4	v	0.10	0/497	0.27	0/690
5	B	0.26	0/1602	0.43	0/2230
5	C	0.22	0/1602	0.39	0/2230
6	A	0.10	0/753	0.27	0/1047
6	G	0.11	0/753	0.38	0/1047
6	e	0.18	0/4605	0.32	0/5751
6	f	0.18	0/4605	0.32	0/5753
All	All	0.18	0/21221	0.35	0/28212

There are no bond length outliers.

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	E	477	0	204	10	0
1	F	477	0	204	22	0
2	D	2054	0	943	75	0
2	H	2118	0	971	48	0
2	g	154	0	65	0	0
2	h	154	0	65	0	0
3	d	441	0	204	5	0
3	i	441	0	204	4	0
4	k	498	0	225	5	0
4	v	498	0	225	3	0
5	B	1604	0	700	22	0
5	C	1604	0	700	27	0
6	A	756	0	333	8	0
6	G	756	0	333	3	0
6	e	4608	0	1207	12	0
6	f	4609	0	1210	15	0
All	All	21249	0	7793	254	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 9.

All (254) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:e:1102:PHE:H	6:e:1107:ILE:H	1.31	0.78
2:D:522:ARG:HA	2:D:540:SER:HA	1.74	0.69
5:C:119:LEU:O	5:C:123:VAL:N	2.26	0.68
6:A:152:PHE:O	6:A:156:ALA:HB3	1.94	0.68
1:E:68:PHE:HA	1:E:81:ALA:HB2	1.75	0.68
2:H:413:PHE:HA	2:H:421:PHE:HA	1.76	0.68
5:B:262:CYS:O	5:B:266:GLY:N	2.28	0.67
6:A:40:LEU:HA	6:A:45:GLY:HA2	1.77	0.67
2:H:470:LEU:HA	2:H:484:SER:HA	1.77	0.66
5:C:230:VAL:HA	5:C:270:ILE:H	1.61	0.66
1:F:21:ILE:HA	1:F:32:SER:HA	1.76	0.66
2:H:287:ALA:HB3	2:H:303:PHE:H	1.61	0.65
2:D:408:VAL:HA	2:D:425:SER:HA	1.78	0.65
2:D:483:TRP:HA	2:D:490:PRO:HA	1.78	0.65
2:D:233:ILE:HA	2:D:237:ALA:HB3	1.78	0.65
2:H:575:GLU:HA	2:H:578:ALA:HB3	1.80	0.64
5:B:92:SER:HA	5:B:103:ARG:HA	1.80	0.64
2:D:309:VAL:HA	2:D:326:THR:HA	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:504:VAL:HA	2:H:516:CYS:HA	1.80	0.64
6:f:961:GLU:N	6:f:972:ASN:O	2.32	0.63
6:f:1197:LEU:O	6:f:1202:PHE:N	2.27	0.63
6:e:1197:LEU:O	6:e:1202:PHE:N	2.31	0.63
1:F:78:ILE:HA	1:F:91:ILE:HA	1.82	0.62
3:i:68:HIS:HA	3:i:88:SER:HA	1.82	0.62
2:D:376:SER:H	2:D:380:LYS:H	1.47	0.62
2:D:409:THR:N	2:D:424:GLY:O	2.34	0.61
2:H:304:HIS:N	2:H:341:ARG:O	2.33	0.61
2:D:323:VAL:HA	2:D:333:LEU:HA	1.82	0.61
2:D:430:VAL:N	2:D:446:PHE:O	2.31	0.61
5:B:219:LEU:N	5:B:263:LEU:O	2.33	0.61
2:D:321:LEU:HA	2:D:335:ASP:HA	1.83	0.61
3:d:73:PHE:HA	3:d:86:PHE:HA	1.82	0.61
5:C:288:VAL:O	5:C:293:GLY:N	2.33	0.61
5:C:119:LEU:HA	5:C:122:ALA:HB3	1.82	0.61
2:D:548:ASN:H	2:D:562:GLY:HA3	1.66	0.61
4:k:63:TYR:HA	4:k:110:GLY:HA2	1.83	0.61
2:D:238:LYS:HA	2:D:574:GLY:H	1.65	0.60
2:D:287:ALA:HB3	2:D:303:PHE:H	1.66	0.60
5:B:288:VAL:O	5:B:293:GLY:N	2.34	0.60
1:E:67:THR:H	1:F:73:SER:HA	1.67	0.60
2:D:481:LYS:HA	2:D:493:SER:HA	1.84	0.60
2:D:504:VAL:HA	2:D:516:CYS:HA	1.84	0.59
6:e:719:THR:O	6:e:736:LYS:N	2.33	0.59
2:H:552:TRP:HA	2:H:559:ILE:HA	1.85	0.59
2:D:255:VAL:O	2:D:274:ASN:N	2.30	0.59
2:D:581:ARG:O	2:D:585:TRP:N	2.33	0.59
2:H:472:VAL:HA	2:H:482:LEU:HA	1.84	0.59
5:B:141:ARG:O	5:B:145:VAL:N	2.36	0.58
2:D:384:TRP:HA	2:D:393:GLN:H	1.67	0.58
1:E:23:VAL:HA	1:E:30:ILE:H	1.67	0.58
5:C:124:SER:O	5:C:128:LEU:N	2.34	0.58
5:B:221:HIS:N	5:B:264:GLN:O	2.35	0.58
3:d:77:TYR:HA	3:d:82:ALA:HA	1.84	0.58
2:H:333:LEU:O	2:H:344:VAL:N	2.35	0.58
6:f:719:THR:N	6:f:736:LYS:O	2.36	0.58
1:F:77:GLU:N	1:F:92:GLN:O	2.36	0.58
5:C:93:VAL:H	5:C:103:ARG:HA	1.68	0.58
2:D:423:VAL:O	2:D:431:TYR:N	2.37	0.58
2:D:523:LEU:N	2:D:539:ILE:O	2.30	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:70:ARG:HA	1:E:79:MET:HA	1.86	0.57
1:F:71:ILE:N	1:F:78:ILE:O	2.32	0.57
2:H:286:VAL:HA	2:H:304:HIS:HA	1.86	0.57
2:D:452:PRO:O	2:D:476:PHE:N	2.37	0.57
2:D:372:LEU:N	2:D:384:TRP:O	2.35	0.57
2:D:332:VAL:HA	2:D:346:ARG:HA	1.87	0.57
2:D:325:GLY:HA2	2:D:331:ILE:HA	1.86	0.57
2:H:432:THR:O	2:H:443:SER:N	2.27	0.56
2:D:482:LEU:O	2:D:491:LEU:N	2.38	0.56
5:C:141:ARG:O	5:C:145:VAL:N	2.35	0.56
6:G:40:LEU:HA	6:G:45:GLY:HA2	1.86	0.56
2:D:286:VAL:HA	2:D:304:HIS:HA	1.86	0.56
1:F:71:ILE:O	1:F:78:ILE:N	2.39	0.56
5:C:95:ASP:O	5:C:100:ASP:N	2.39	0.56
1:F:23:VAL:HA	1:F:29:PRO:HA	1.88	0.56
1:F:72:ARG:HA	1:F:77:GLU:HA	1.88	0.56
4:k:67:CYS:HA	4:k:106:VAL:HA	1.88	0.56
5:C:144:THR:O	5:C:148:SER:N	2.34	0.56
2:D:381:ILE:N	2:D:396:MET:O	2.35	0.56
2:H:310:MET:N	2:H:325:GLY:O	2.35	0.55
2:D:308:ALA:O	2:D:327:TYR:N	2.31	0.55
2:D:552:TRP:HA	2:D:559:ILE:HA	1.89	0.55
2:D:257:SER:N	2:D:272:SER:O	2.40	0.55
2:D:454:THR:N	2:D:474:SER:O	2.40	0.55
2:D:413:PHE:HA	2:D:421:PHE:HA	1.87	0.55
2:D:360:CYS:O	2:D:375:ILE:N	2.39	0.55
2:H:374:SER:N	2:H:382:CYS:O	2.40	0.54
2:H:454:THR:H	2:H:475:SER:HA	1.72	0.54
5:B:118:LEU:O	5:B:122:ALA:N	2.36	0.54
5:B:58:LEU:N	5:B:132:LEU:O	2.38	0.54
2:D:285:GLY:O	2:D:305:CYS:N	2.40	0.54
2:D:501:VAL:HA	2:D:518:ASP:HA	1.89	0.54
2:H:473:THR:O	2:H:481:LYS:N	2.38	0.54
4:k:81:SER:HA	4:v:66:THR:HA	1.88	0.54
6:e:996:LEU:O	6:e:1019:TYR:N	2.41	0.54
5:B:133:VAL:N	5:B:226:PRO:O	2.40	0.53
6:f:715:GLY:HA2	6:f:825:GLU:H	1.73	0.53
6:f:723:THR:O	6:f:732:VAL:N	2.40	0.53
6:A:120:LYS:HA	6:A:135:LEU:HA	1.91	0.53
2:H:366:THR:N	2:H:369:ALA:O	2.42	0.53
1:E:69:LEU:N	1:E:80:VAL:O	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:57:VAL:O	1:E:61:ASP:N	2.33	0.53
2:H:381:ILE:N	2:H:396:MET:O	2.37	0.53
5:B:358:ASP:O	5:B:362:PHE:N	2.34	0.53
5:C:93:VAL:O	5:C:102:THR:N	2.39	0.53
2:D:244:GLN:HA	2:D:569:VAL:HA	1.91	0.53
5:C:262:CYS:O	5:C:267:ALA:N	2.42	0.53
5:C:59:VAL:N	5:C:107:TRP:O	2.40	0.53
2:D:527:ASN:O	2:D:531:ASP:N	2.37	0.52
5:C:279:ASN:O	5:C:283:LEU:N	2.38	0.52
5:B:318:LYS:O	5:B:322:ILE:N	2.38	0.52
2:H:473:THR:N	2:H:481:LYS:O	2.41	0.52
5:B:279:ASN:O	5:B:283:LEU:N	2.41	0.52
2:D:474:SER:HA	2:D:480:VAL:HA	1.91	0.52
1:F:70:ARG:HA	1:F:79:MET:HA	1.92	0.51
2:H:350:SER:N	2:H:353:ALA:HB3	2.25	0.51
4:k:68:VAL:N	4:k:105:ILE:O	2.38	0.51
6:e:717:ILE:O	6:e:737:VAL:N	2.42	0.51
2:D:471:PHE:O	2:D:483:TRP:N	2.42	0.51
1:F:27:GLY:HA2	1:F:44:SER:HA	1.92	0.51
4:v:64:ILE:O	4:v:109:PHE:N	2.43	0.51
6:e:725:VAL:N	6:e:728:ARG:O	2.43	0.51
2:H:482:LEU:N	2:H:492:TYR:O	2.35	0.51
3:d:78:LEU:N	3:d:81:VAL:O	2.39	0.51
2:D:421:PHE:N	2:D:433:ALA:O	2.39	0.51
6:e:715:GLY:O	6:e:825:GLU:N	2.43	0.51
2:D:482:LEU:N	2:D:492:TYR:O	2.44	0.51
2:D:505:MET:N	2:D:515:ALA:O	2.43	0.51
2:H:380:LYS:HA	2:H:397:GLU:HA	1.93	0.51
6:A:79:VAL:O	6:A:116:LEU:N	2.44	0.51
2:D:372:LEU:O	2:D:384:TRP:N	2.44	0.51
6:A:116:LEU:HA	6:A:139:THR:HA	1.93	0.51
2:D:362:ASN:O	2:D:373:ILE:N	2.44	0.51
2:D:526:TRP:HA	2:D:536:THR:H	1.75	0.51
1:F:68:PHE:HA	1:F:81:ALA:HA	1.93	0.50
2:D:431:TYR:HA	2:D:445:MET:HA	1.92	0.50
1:F:80:VAL:HA	1:F:89:ILE:HA	1.93	0.50
2:D:376:SER:H	2:D:380:LYS:N	2.08	0.50
2:H:373:ILE:HA	2:H:383:SER:HA	1.94	0.50
2:H:421:PHE:O	2:H:433:ALA:N	2.39	0.50
2:H:333:LEU:N	2:H:345:GLN:O	2.44	0.50
2:H:482:LEU:O	2:H:491:LEU:N	2.43	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:A:118:PHE:HA	6:A:137:VAL:HA	1.94	0.50
2:D:240:SER:O	2:D:572:ASP:N	2.35	0.50
2:D:247:ASP:O	2:D:251:SER:N	2.36	0.50
6:e:304:LEU:O	6:e:309:ARG:N	2.45	0.50
2:D:419:ASN:C	2:D:435:ARG:H	2.19	0.50
2:H:361:VAL:HA	2:H:374:SER:HA	1.94	0.49
2:H:479:THR:HA	2:H:495:GLU:HA	1.93	0.49
3:i:75:TYR:HA	3:i:84:LEU:HA	1.93	0.49
5:B:137:ALA:O	5:B:232:THR:N	2.44	0.49
2:D:455:GLY:O	2:D:474:SER:N	2.45	0.49
6:f:963:ARG:N	6:f:970:TYR:O	2.45	0.49
2:D:361:VAL:HA	2:D:374:SER:HA	1.94	0.49
2:H:561:VAL:N	2:H:569:VAL:O	2.34	0.49
1:E:69:LEU:HA	1:F:71:ILE:HA	1.93	0.49
1:F:22:VAL:N	1:F:31:LYS:O	2.46	0.49
2:H:227:GLU:O	2:H:231:GLY:N	2.43	0.49
2:H:526:TRP:HA	2:H:536:THR:H	1.78	0.49
2:D:364:VAL:H	2:D:372:LEU:HA	1.77	0.49
5:C:89:LEU:N	5:C:106:VAL:O	2.45	0.48
2:H:553:THR:N	2:H:558:GLU:O	2.44	0.48
2:H:561:VAL:O	2:H:569:VAL:N	2.36	0.48
2:D:350:SER:H	2:D:353:ALA:HB3	1.78	0.48
2:H:434:CYS:O	2:H:441:GLY:N	2.46	0.48
5:C:118:LEU:O	5:C:122:ALA:N	2.45	0.48
1:F:22:VAL:O	1:F:30:ILE:N	2.47	0.48
5:B:72:THR:O	5:B:77:ALA:N	2.35	0.48
2:D:430:VAL:O	2:D:446:PHE:N	2.38	0.48
2:D:241:LEU:HA	2:D:571:TYR:HA	1.95	0.48
2:D:304:HIS:N	2:D:341:ARG:O	2.35	0.48
5:C:180:ASP:O	5:C:184:TYR:N	2.46	0.48
5:C:262:CYS:O	5:C:266:GLY:N	2.47	0.48
2:D:324:GLY:O	2:D:332:VAL:N	2.47	0.47
6:A:115:SER:O	6:A:140:LEU:N	2.39	0.47
2:H:527:ASN:O	2:H:531:ASP:N	2.40	0.47
1:F:1:MET:O	1:F:5:GLU:N	2.41	0.47
2:D:312:ALA:HA	2:D:324:GLY:HA2	1.96	0.47
2:D:350:SER:N	2:D:353:ALA:HB3	2.30	0.47
6:f:715:GLY:HA2	6:f:825:GLU:N	2.29	0.47
6:f:998:ARG:N	6:f:1016:GLU:O	2.48	0.47
2:H:522:ARG:HA	2:H:540:SER:HA	1.97	0.46
5:B:54:GLY:O	5:B:105:ASN:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:95:ASP:H	5:C:101:HIS:HA	1.80	0.46
5:B:135:PHE:N	5:B:228:LEU:O	2.49	0.46
3:i:52:PRO:HA	3:i:53:THR:HA	1.53	0.46
2:D:412:SER:O	2:D:422:VAL:N	2.49	0.46
5:C:179:LYS:O	5:C:183:ASP:N	2.39	0.46
6:f:715:GLY:O	6:f:824:TRP:N	2.36	0.46
1:F:57:VAL:O	1:F:61:ASP:N	2.42	0.46
3:d:76:PHE:O	3:d:83:ILE:N	2.49	0.46
5:C:231:CYS:N	5:C:270:ILE:O	2.48	0.46
2:D:434:CYS:O	2:D:441:GLY:N	2.47	0.46
5:C:93:VAL:N	5:C:102:THR:O	2.49	0.46
2:H:515:ALA:HA	2:H:525:LEU:HA	1.98	0.45
2:D:358:VAL:HA	2:D:376:SER:HA	1.98	0.45
2:H:521:GLY:N	2:H:545:PRO:O	2.50	0.45
2:H:400:HIS:O	2:H:404:LYS:N	2.49	0.45
6:e:220:CYS:O	6:e:225:GLU:N	2.36	0.45
6:f:721:GLU:O	6:f:734:LYS:N	2.44	0.45
1:E:66:LEU:HA	1:F:74:LYS:H	1.82	0.45
1:F:82:PRO:HA	1:F:87:PHE:HA	1.98	0.45
2:H:503:ASP:O	2:H:517:VAL:N	2.42	0.45
2:D:193:SER:O	2:D:197:LEU:N	2.37	0.45
5:C:58:LEU:N	5:C:132:LEU:O	2.50	0.45
6:e:958:VAL:H	6:e:1106:VAL:N	2.14	0.45
6:e:998:ARG:N	6:e:1017:LYS:O	2.32	0.45
2:D:407:ALA:O	2:D:426:GLU:N	2.30	0.45
2:H:384:TRP:HA	2:H:392:PRO:HA	1.99	0.44
2:H:407:ALA:O	2:H:425:SER:HA	2.16	0.44
3:d:77:TYR:HA	3:d:83:ILE:H	1.82	0.44
2:H:229:LYS:O	2:H:233:ILE:N	2.50	0.44
1:F:9:LYS:O	1:F:13:SER:N	2.51	0.44
5:B:93:VAL:O	5:B:102:THR:N	2.42	0.44
2:D:232:GLU:HA	2:D:235:ALA:HB3	2.00	0.44
1:F:20:ILE:HA	1:F:90:VAL:HA	2.00	0.44
2:H:360:CYS:O	2:H:375:ILE:N	2.33	0.43
2:D:432:THR:O	2:D:443:SER:N	2.35	0.43
2:H:574:GLY:O	2:H:578:ALA:N	2.46	0.43
6:e:636:SER:O	6:e:640:ASP:N	2.51	0.43
6:f:1197:LEU:O	6:f:1201:ARG:N	2.52	0.43
2:D:502:TYR:N	2:D:517:VAL:O	2.51	0.43
5:C:247:ARG:O	5:C:251:LEU:N	2.41	0.43
2:H:331:ILE:O	2:H:347:THR:N	2.32	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:B:159:HIS:O	5:B:163:MET:N	2.52	0.42
5:C:220:THR:N	5:C:264:GLN:O	2.52	0.42
2:D:582:ASN:O	2:D:586:ALA:N	2.45	0.42
2:H:383:SER:O	2:H:393:GLN:N	2.53	0.42
5:B:44:SER:O	5:B:48:ARG:N	2.52	0.42
5:B:135:PHE:O	5:B:230:VAL:N	2.53	0.42
6:f:753:LEU:O	6:f:758:PHE:N	2.41	0.42
2:H:322:VAL:N	2:H:334:TRP:O	2.45	0.42
5:C:263:LEU:C	5:C:266:GLY:H	2.28	0.42
2:H:322:VAL:O	2:H:334:TRP:N	2.48	0.42
2:D:245:PHE:O	2:D:568:ILE:N	2.37	0.42
2:D:373:ILE:HA	2:D:383:SER:HA	2.01	0.42
5:B:136:VAL:HA	5:B:230:VAL:H	1.84	0.42
2:D:331:ILE:O	2:D:347:THR:N	2.53	0.42
4:k:82:SER:N	4:v:65:VAL:O	2.48	0.42
6:G:117:ALA:N	6:G:138:LEU:O	2.53	0.41
1:E:71:ILE:N	1:E:78:ILE:O	2.53	0.41
1:E:78:ILE:HA	1:E:91:ILE:HA	2.01	0.41
1:F:21:ILE:O	1:F:89:ILE:N	2.50	0.41
6:f:441:LYS:O	6:f:445:ASN:N	2.48	0.41
5:B:73:LYS:C	5:B:76:GLY:H	2.28	0.41
5:C:92:SER:HA	5:C:103:ARG:HA	2.02	0.41
6:A:38:VAL:O	6:A:42:LEU:N	2.41	0.41
2:D:381:ILE:O	2:D:396:MET:N	2.54	0.41
5:C:133:VAL:O	5:C:228:LEU:N	2.49	0.41
2:D:256:VAL:HA	2:D:273:TYR:HA	2.02	0.41
2:D:383:SER:O	2:D:393:GLN:N	2.54	0.41
3:i:73:PHE:HA	3:i:86:PHE:HA	2.02	0.41
6:f:717:ILE:O	6:f:719:THR:N	2.54	0.41
6:f:804:LEU:O	6:f:894:SER:N	2.53	0.40
6:G:77:VAL:O	6:G:118:PHE:N	2.39	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	E	94/96 (98%)	78 (83%)	16 (17%)	0	100	100
1	F	94/96 (98%)	82 (87%)	12 (13%)	0	100	100
2	D	412/612 (67%)	368 (89%)	44 (11%)	0	100	100
2	H	427/612 (70%)	384 (90%)	43 (10%)	0	100	100
2	g	29/612 (5%)	28 (97%)	1 (3%)	0	100	100
2	h	29/612 (5%)	23 (79%)	6 (21%)	0	100	100
3	d	87/89 (98%)	80 (92%)	7 (8%)	0	100	100
3	i	87/89 (98%)	82 (94%)	4 (5%)	1 (1%)	11	46
4	k	99/113 (88%)	96 (97%)	3 (3%)	0	100	100
4	v	99/113 (88%)	98 (99%)	1 (1%)	0	100	100
5	B	320/492 (65%)	285 (89%)	34 (11%)	1 (0%)	36	72
5	C	320/492 (65%)	292 (91%)	27 (8%)	1 (0%)	36	72
6	A	146/4843 (3%)	140 (96%)	6 (4%)	0	100	100
6	G	146/4843 (3%)	142 (97%)	4 (3%)	0	100	100
6	e	1146/4843 (24%)	1087 (95%)	59 (5%)	0	100	100
6	f	1143/4843 (24%)	1073 (94%)	67 (6%)	3 (0%)	36	72
All	All	4678/23400 (20%)	4338 (93%)	334 (7%)	6 (0%)	49	83

All (6) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	C	349	VAL
6	f	451	ARG
6	f	452	ILE
5	B	349	VAL
6	f	1236	VAL
3	i	51	ASN

5.3.2 Protein sidechains ⓘ

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

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 oligosaccharides 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.

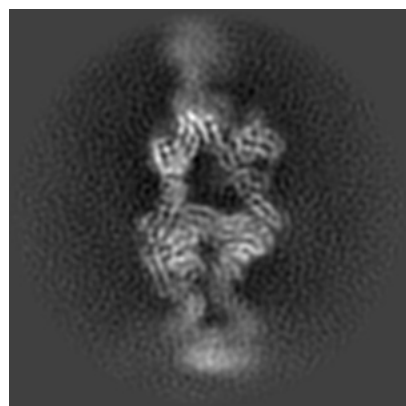
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-47430. These allow visual inspection of the internal detail of the map and identification of artifacts.

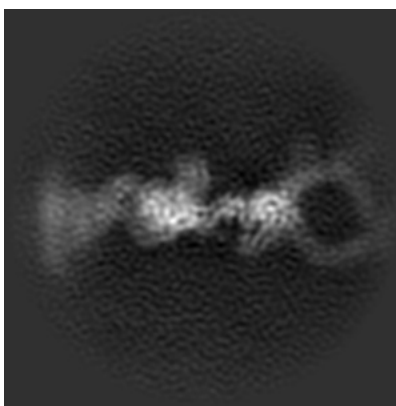
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

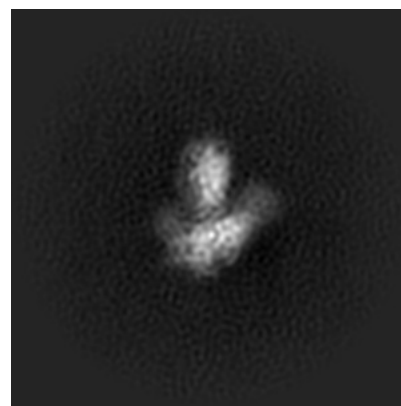
6.1.1 Primary map



X

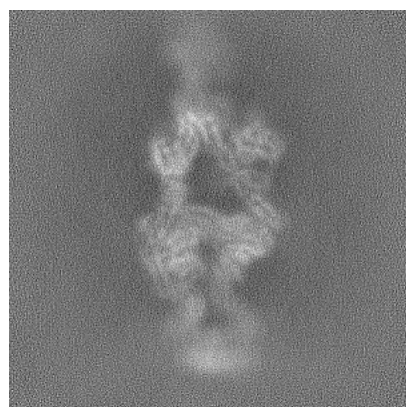


Y

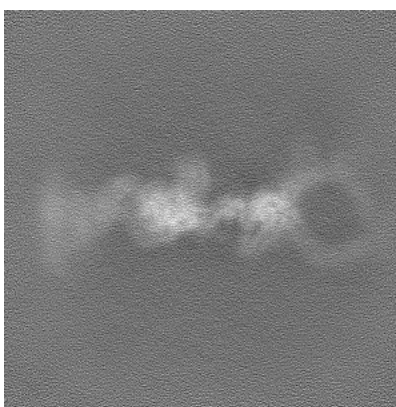


Z

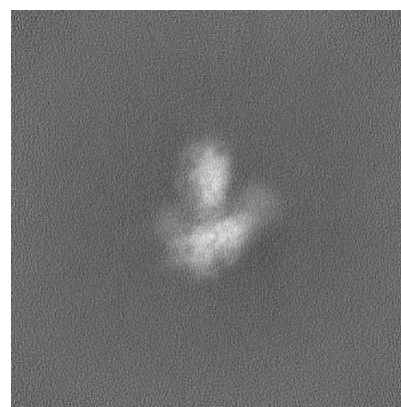
6.1.2 Raw map



X



Y

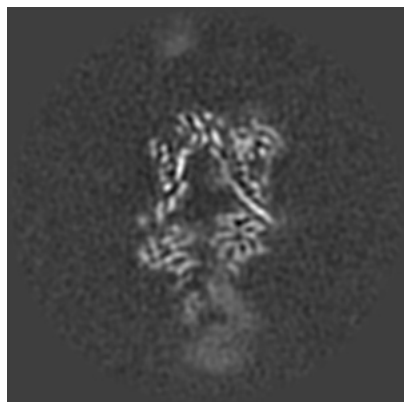


Z

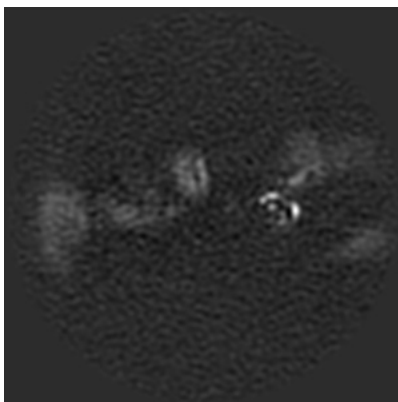
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

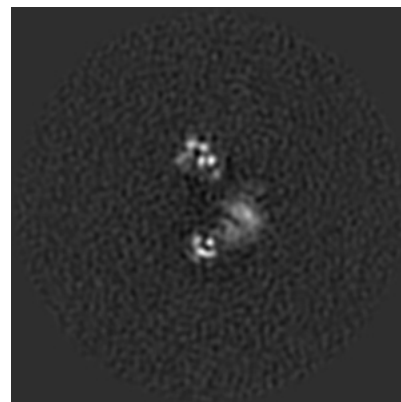
6.2.1 Primary map



X Index: 208

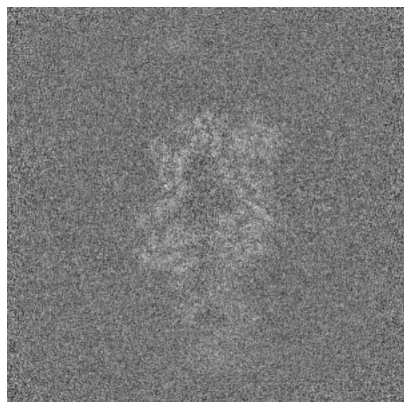


Y Index: 208

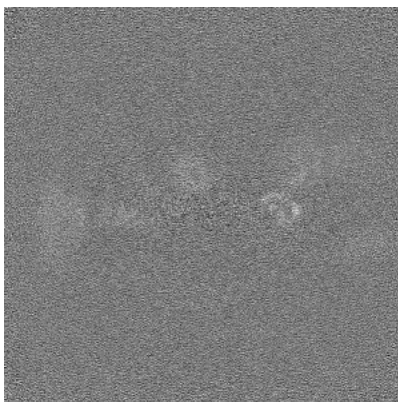


Z Index: 208

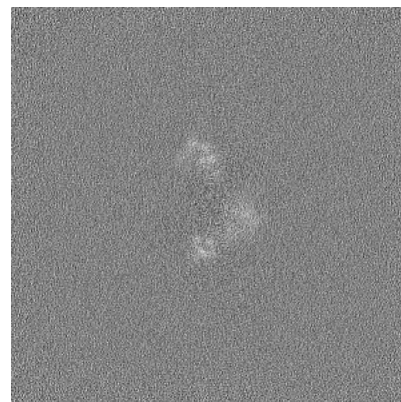
6.2.2 Raw map



X Index: 208



Y Index: 208



Z Index: 208

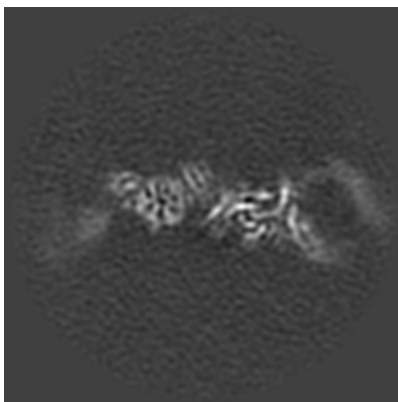
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 206

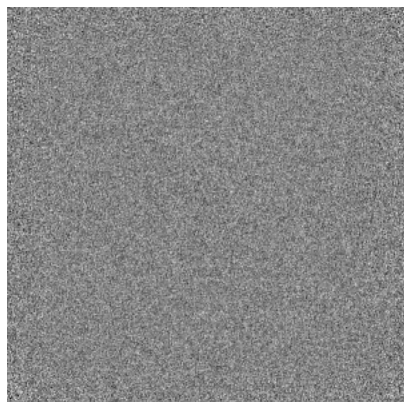


Y Index: 179

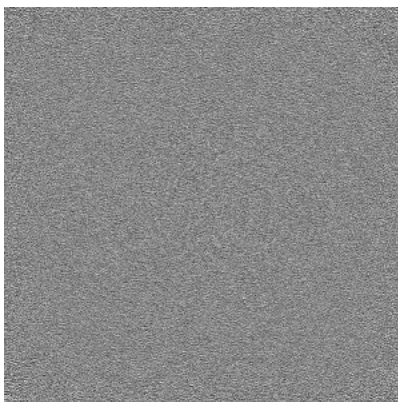


Z Index: 269

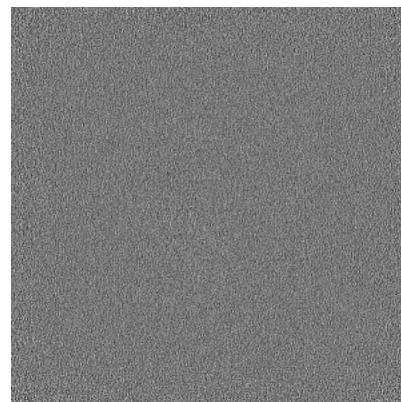
6.3.2 Raw map



X Index: 0



Y Index: 0

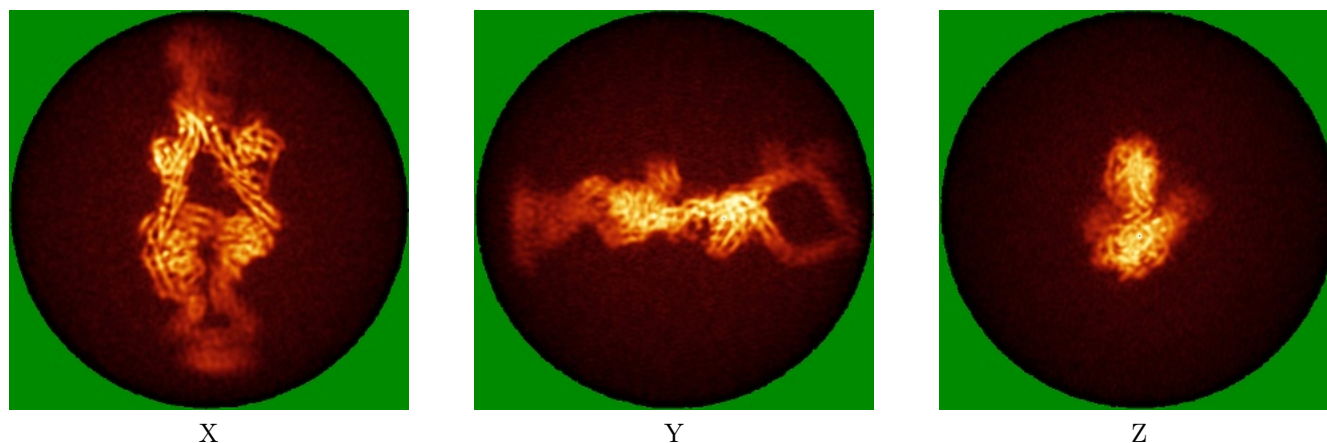


Z Index: 0

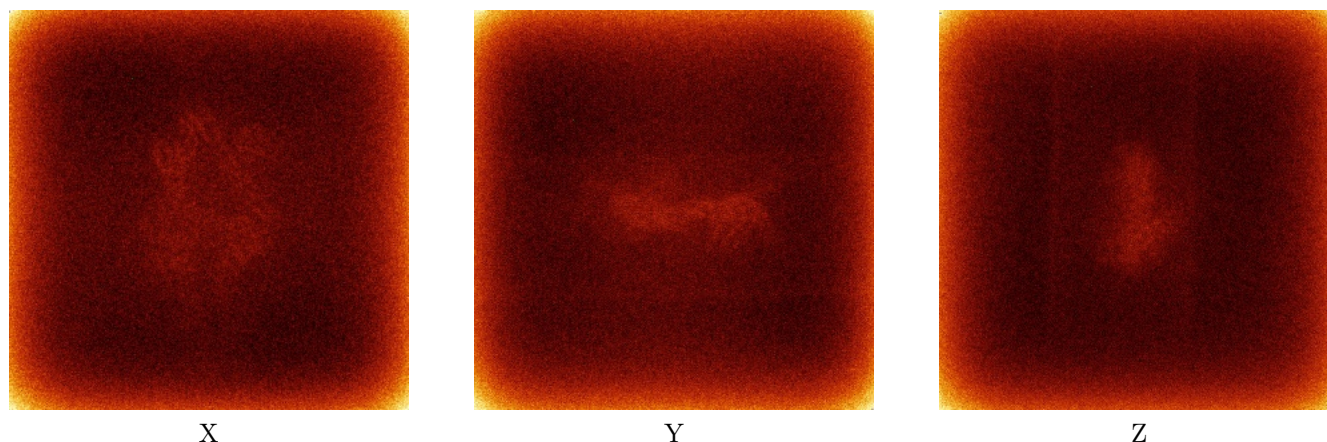
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

6.4.1 Primary map



6.4.2 Raw map



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](#)

This section was not generated.

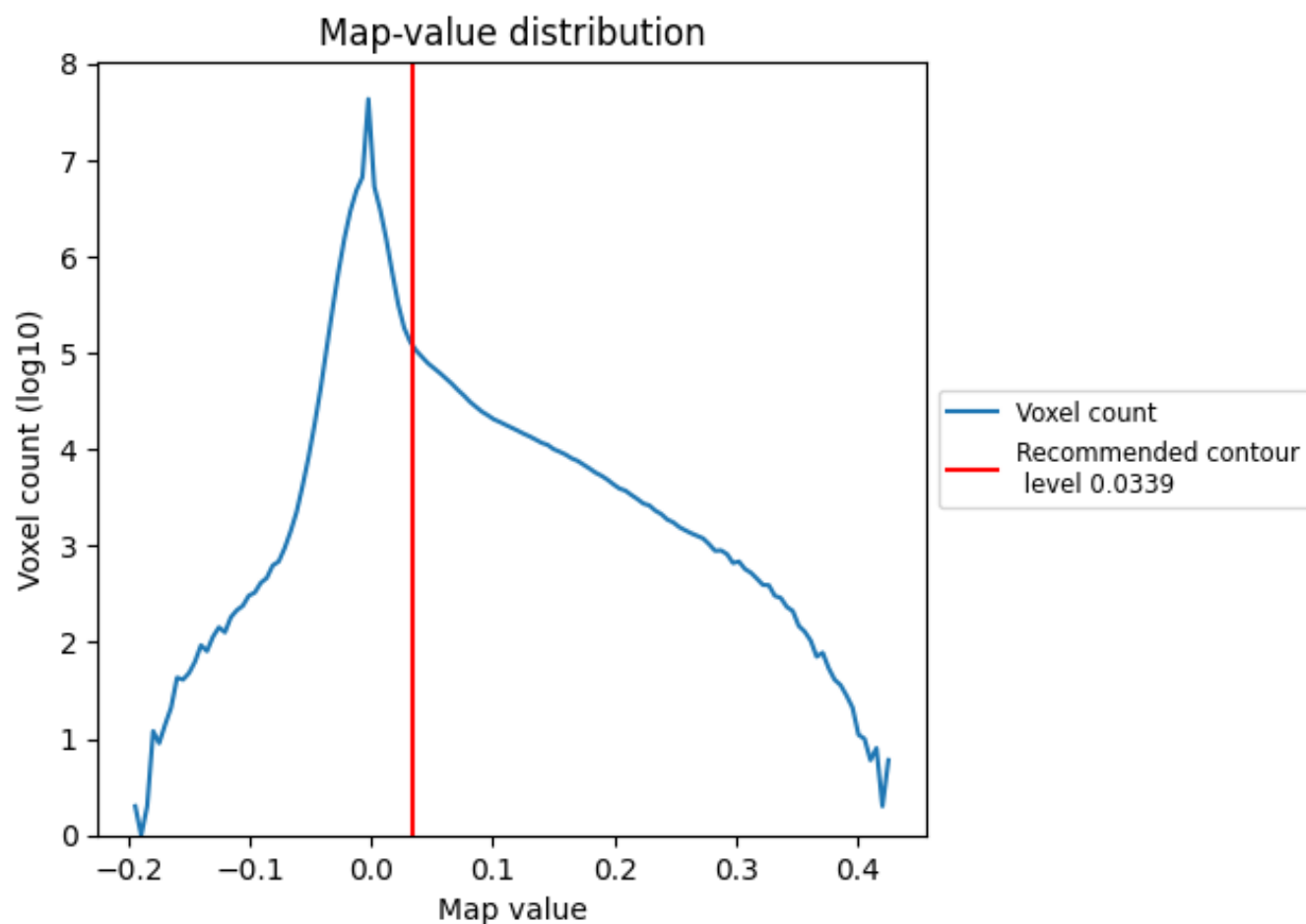
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

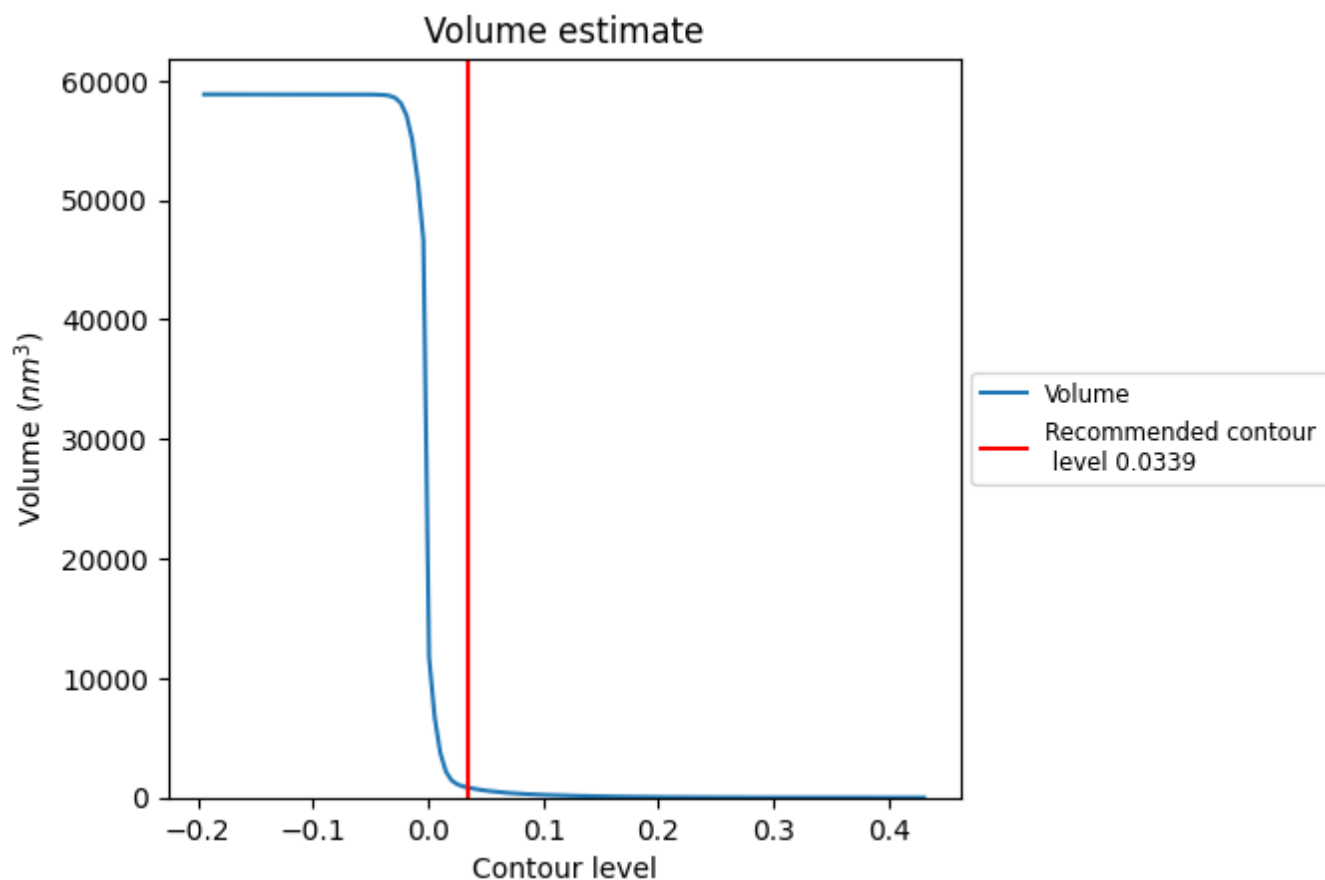
This section contains the results of statistical analysis of the map.

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.

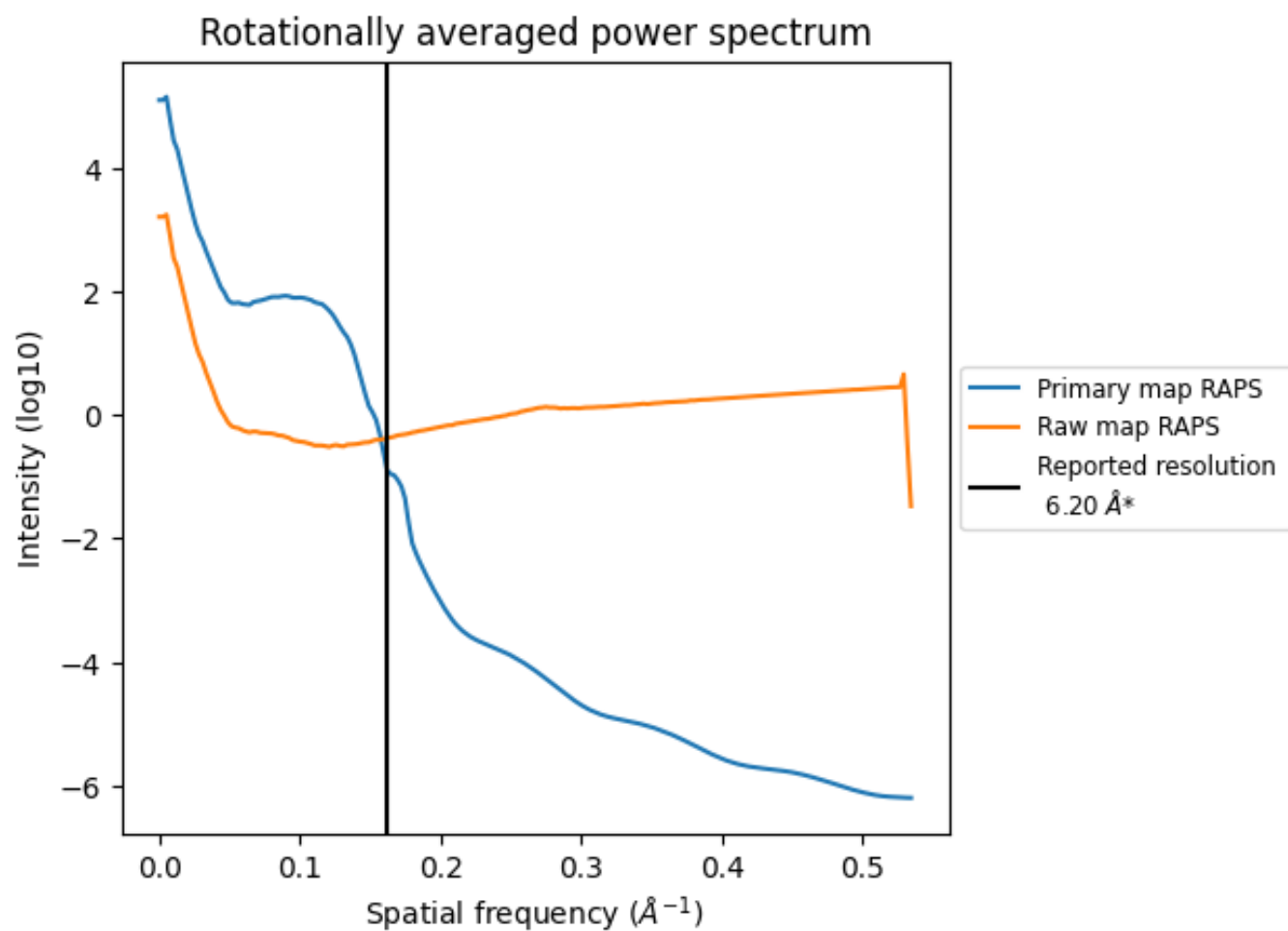
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 854 nm³; this corresponds to an approximate mass of 772 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 ⓘ

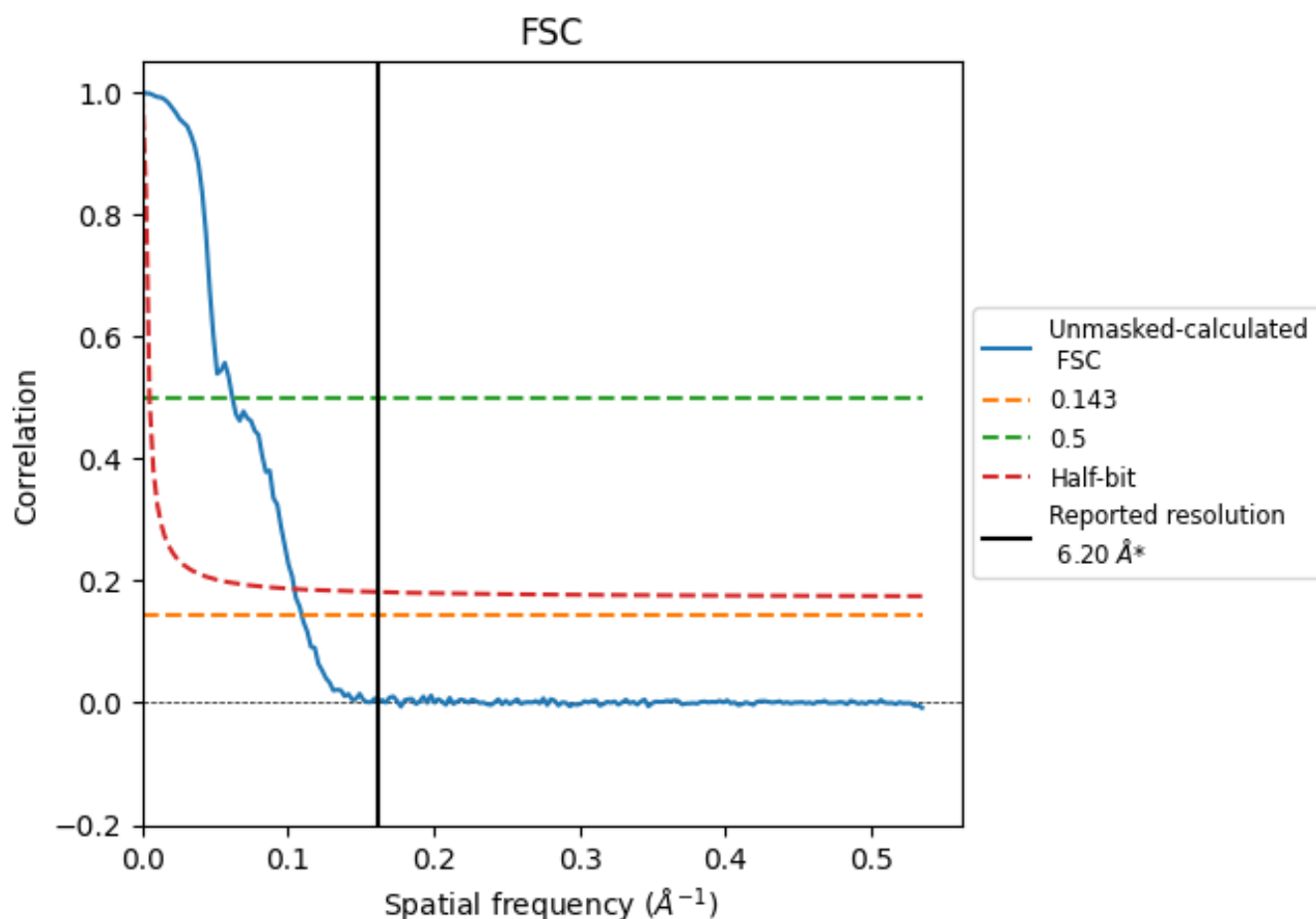


*Reported resolution corresponds to spatial frequency of 0.161 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.161 \AA^{-1}

8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	6.20	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	9.14	16.18	9.58

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 9.14 differs from the reported value 6.2 by more than 10 %

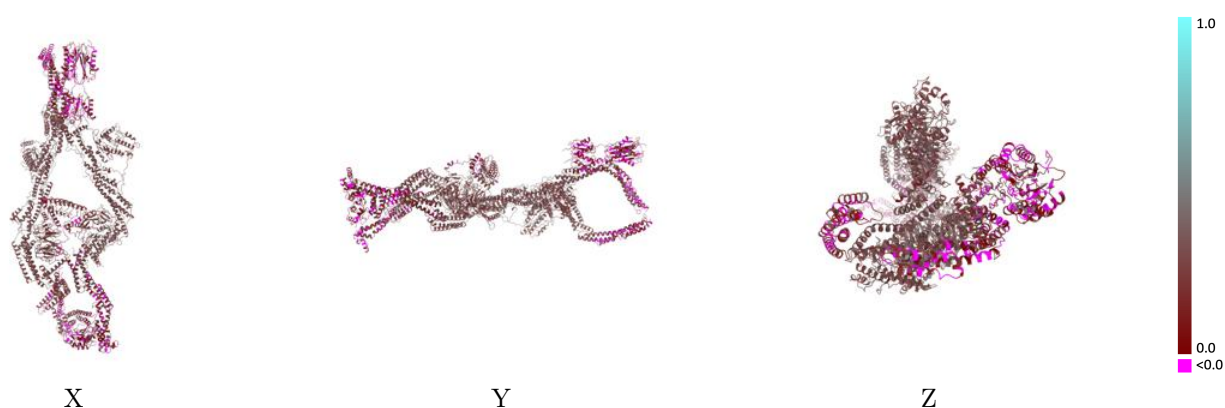
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-47430 and PDB model 9E23. Per-residue inclusion information can be found in section 3 on page 25.

9.1 Map-model overlay [i](#)

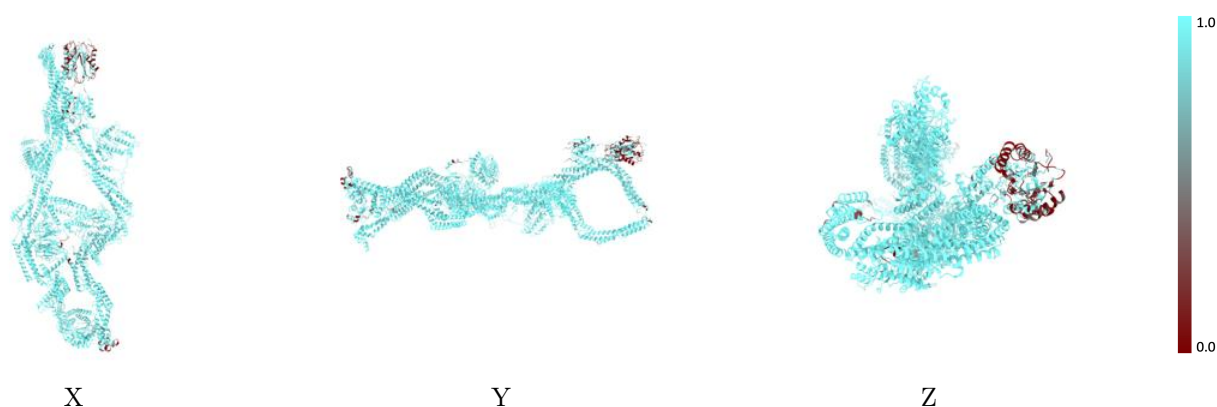
This section was not generated.

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



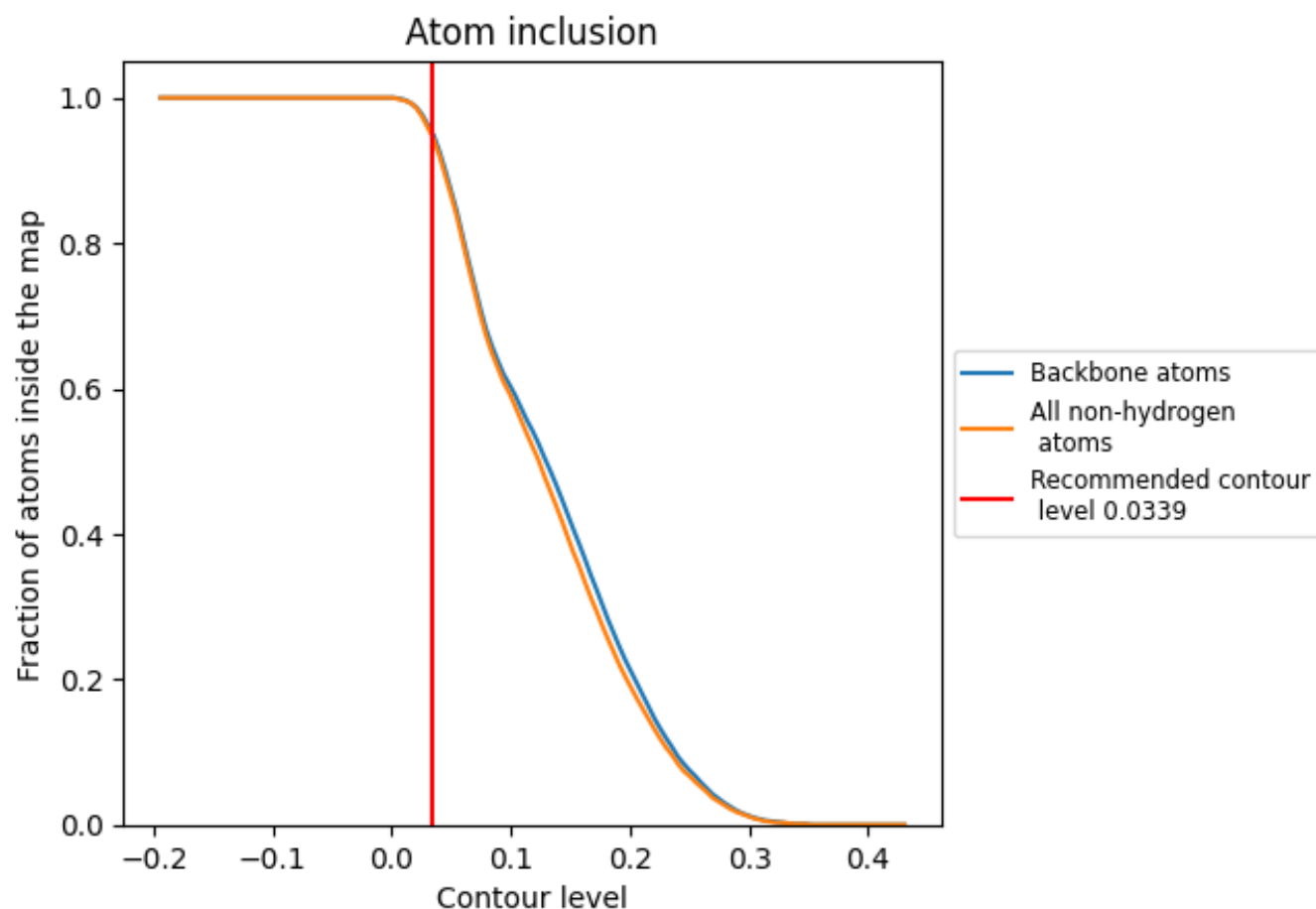
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.0339).

9.4 Atom inclusion [i](#)



At the recommended contour level, 95% of all backbone atoms, 95% 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 (0.0339) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.9470	<div></div> 0.2380
A	<div></div> 0.9920	<div></div> 0.1480
B	<div></div> 0.9990	<div></div> 0.3100
C	<div></div> 0.9990	<div></div> 0.3080
D	<div></div> 1.0000	<div></div> 0.2770
E	<div></div> 0.9960	<div></div> 0.2240
F	<div></div> 0.9770	<div></div> 0.2410
G	<div></div> 0.9170	<div></div> 0.1320
H	<div></div> 0.9750	<div></div> 0.2620
d	<div></div> 0.9210	<div></div> 0.1720
e	<div></div> 0.9910	<div></div> 0.2410
f	<div></div> 0.9700	<div></div> 0.2480
g	<div></div> 0.7340	<div></div> 0.2210
h	<div></div> 0.6560	<div></div> 0.1760
i	<div></div> 0.8030	<div></div> 0.0820
k	<div></div> 0.4560	<div></div> 0.0940
v	<div></div> 0.3510	<div></div> 0.0840

