WORLDWIDE wwPDB PROTEIN DATA BANK

wwPDB EM Validation Summary Report (i)

Feb 4, 2026 – 03:42 PM JST

PDB ID	:	9UCL / pdb_00009ucl
EMDB ID	:	EMD-64047
Title	:	CryoEM structure of IgV domain of human Nectin-4 with Trimbody
Authors	:	Song, J.Y.; Wang, W.
Deposited on	:	2025-04-04
Resolution	:	2.43 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*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

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

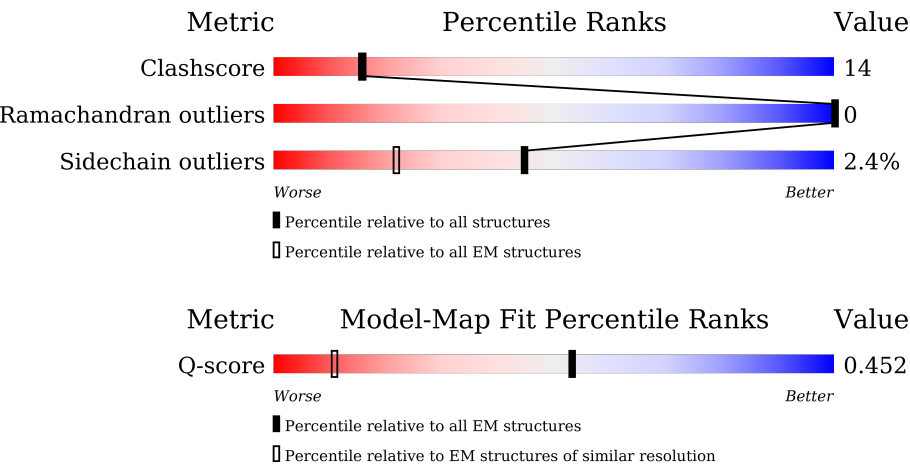The following versions of software and data (see references (i)) were used in the production of this report:

EMDB validation analysis	:	0.0.1.dev129
MolProbity	:	4-5-2 with Phenix2.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
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)	:	2.47

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 2.43 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	Percentile Ranks	Value
Clashscore		14
Ramachandran outliers		0
Sidechain outliers		2.4%

Worse ← → *Better*

▮ Percentile relative to all structures
▯ Percentile relative to all EM structures

Metric	Model-Map Fit Percentile Ranks	Value
Q-score		0.452

Worse ← → *Better*

▮ Percentile relative to all EM structures
▯ Percentile relative to EM structures of similar resolution

Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	5787 (1.94 - 2.93)

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

Mol	Chain	Length	Quality of chain
1	A	332	68%　　27%　・・
1	B	332	70%　　25%　・・
1	C	332	66%　　30%　・
2	D	251	73%　　21%　・・

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	E	251	73% ⸱ 22% ⸱ ⸱
2	F	251	76% ⸱ 19% ⸱ ⸱
3	G	123	11% 51% 37% 5% ⸱ 6%
3	H	123	11% 57% 35% ⸱ ⸱ 6%
3	I	123	14% 53% 39% ⸱ 6%

2 Entry composition ⓘ

There are 3 unique types of molecules in this entry. The entry contains 15549 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 H3-PrAC-5350A,2-dehydro-3-deoxyphosphogluconate aldolase/4-hydroxy-2-oxoglutarate aldolase.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	319	Total	C	N	O	S	0	0
			2424	1545	414	455	10		
1	B	319	Total	C	N	O	S	0	0
			2424	1545	414	455	10		
1	C	319	Total	C	N	O	S	0	0
			2424	1545	414	455	10		

There are 48 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	141	ILE	LYS	conflict	UNP Q9WXS1
A	145	VAL	LEU	conflict	UNP Q9WXS1
A	149	ALA	GLU	conflict	UNP Q9WXS1
A	170	ALA	GLU	conflict	UNP Q9WXS1
A	173	VAL	PHE	conflict	UNP Q9WXS1
A	322	ALA	-	expression tag	UNP Q9WXS1
A	323	ALA	-	expression tag	UNP Q9WXS1
A	324	ALA	-	expression tag	UNP Q9WXS1
A	325	LEU	-	expression tag	UNP Q9WXS1
A	326	GLU	-	expression tag	UNP Q9WXS1
A	327	HIS	-	expression tag	UNP Q9WXS1
A	328	HIS	-	expression tag	UNP Q9WXS1
A	329	HIS	-	expression tag	UNP Q9WXS1
A	330	HIS	-	expression tag	UNP Q9WXS1
A	331	HIS	-	expression tag	UNP Q9WXS1
A	332	HIS	-	expression tag	UNP Q9WXS1
B	141	ILE	LYS	conflict	UNP Q9WXS1
B	145	VAL	LEU	conflict	UNP Q9WXS1
B	149	ALA	GLU	conflict	UNP Q9WXS1
B	170	ALA	GLU	conflict	UNP Q9WXS1
B	173	VAL	PHE	conflict	UNP Q9WXS1
B	322	ALA	-	expression tag	UNP Q9WXS1
B	323	ALA	-	expression tag	UNP Q9WXS1

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	324	ALA	-	expression tag	UNP Q9WXS1
B	325	LEU	-	expression tag	UNP Q9WXS1
B	326	GLU	-	expression tag	UNP Q9WXS1
B	327	HIS	-	expression tag	UNP Q9WXS1
B	328	HIS	-	expression tag	UNP Q9WXS1
B	329	HIS	-	expression tag	UNP Q9WXS1
B	330	HIS	-	expression tag	UNP Q9WXS1
B	331	HIS	-	expression tag	UNP Q9WXS1
B	332	HIS	-	expression tag	UNP Q9WXS1
C	141	ILE	LYS	conflict	UNP Q9WXS1
C	145	VAL	LEU	conflict	UNP Q9WXS1
C	149	ALA	GLU	conflict	UNP Q9WXS1
C	170	ALA	GLU	conflict	UNP Q9WXS1
C	173	VAL	PHE	conflict	UNP Q9WXS1
C	322	ALA	-	expression tag	UNP Q9WXS1
C	323	ALA	-	expression tag	UNP Q9WXS1
C	324	ALA	-	expression tag	UNP Q9WXS1
C	325	LEU	-	expression tag	UNP Q9WXS1
C	326	GLU	-	expression tag	UNP Q9WXS1
C	327	HIS	-	expression tag	UNP Q9WXS1
C	328	HIS	-	expression tag	UNP Q9WXS1
C	329	HIS	-	expression tag	UNP Q9WXS1
C	330	HIS	-	expression tag	UNP Q9WXS1
C	331	HIS	-	expression tag	UNP Q9WXS1
C	332	HIS	-	expression tag	UNP Q9WXS1

- Molecule 2 is a protein called N4-nanobody-TAIL.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	D	242	Total	C	N	O	S	0	0
			1872	1201	314	353	4		
2	E	242	Total	C	N	O	S	0	0
			1872	1201	314	353	4		
2	F	242	Total	C	N	O	S	0	0
			1872	1201	314	353	4		

- Molecule 3 is a protein called Nectin-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	G	116	Total	C	N	O	S	0	0
			887	553	159	173	2		

Continued on next page...

Continued from previous page...

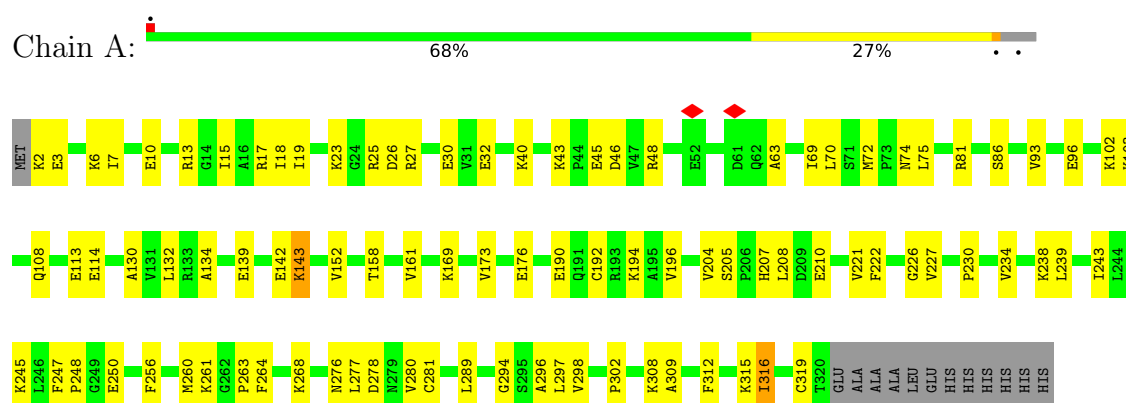| Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	H	116	887	553	159	173	2	0	0
3	I	116	Total	C	N	O	S	0	0
			887	553	159	173	2		

There are 24 discrepancies between the modelled and reference sequences:

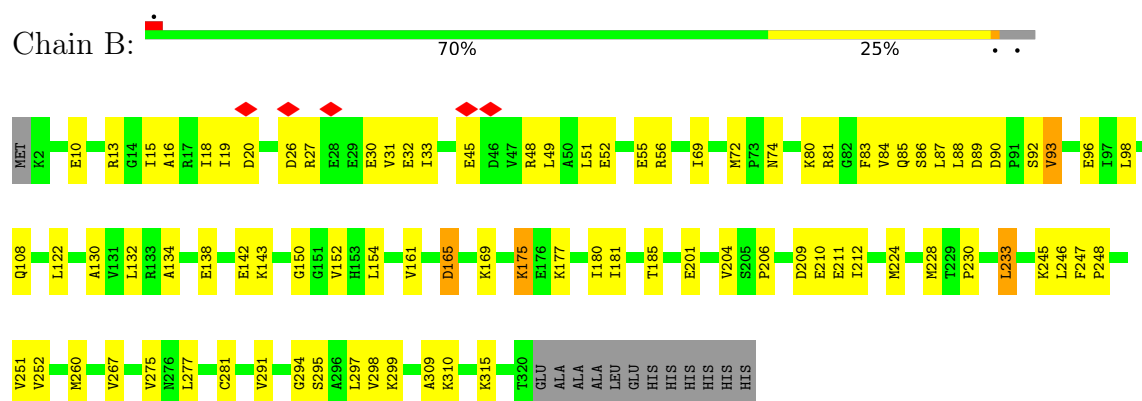| Chain	Residue	Modelled	Actual	Comment	Reference
G	1	MET	-	initiating methionine	UNP Q96NY8
G	117	GLU	-	expression tag	UNP Q96NY8
G	118	HIS	-	expression tag	UNP Q96NY8
G	119	HIS	-	expression tag	UNP Q96NY8
G	120	HIS	-	expression tag	UNP Q96NY8
G	121	HIS	-	expression tag	UNP Q96NY8
G	122	HIS	-	expression tag	UNP Q96NY8
G	123	HIS	-	expression tag	UNP Q96NY8
H	1	MET	-	initiating methionine	UNP Q96NY8
H	117	GLU	-	expression tag	UNP Q96NY8
H	118	HIS	-	expression tag	UNP Q96NY8
H	119	HIS	-	expression tag	UNP Q96NY8
H	120	HIS	-	expression tag	UNP Q96NY8
H	121	HIS	-	expression tag	UNP Q96NY8
H	122	HIS	-	expression tag	UNP Q96NY8
H	123	HIS	-	expression tag	UNP Q96NY8
I	1	MET	-	initiating methionine	UNP Q96NY8
I	117	GLU	-	expression tag	UNP Q96NY8
I	118	HIS	-	expression tag	UNP Q96NY8
I	119	HIS	-	expression tag	UNP Q96NY8
I	120	HIS	-	expression tag	UNP Q96NY8
I	121	HIS	-	expression tag	UNP Q96NY8
I	122	HIS	-	expression tag	UNP Q96NY8
I	123	HIS	-	expression tag	UNP Q96NY8

3   Residue-property plots ⓘ

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

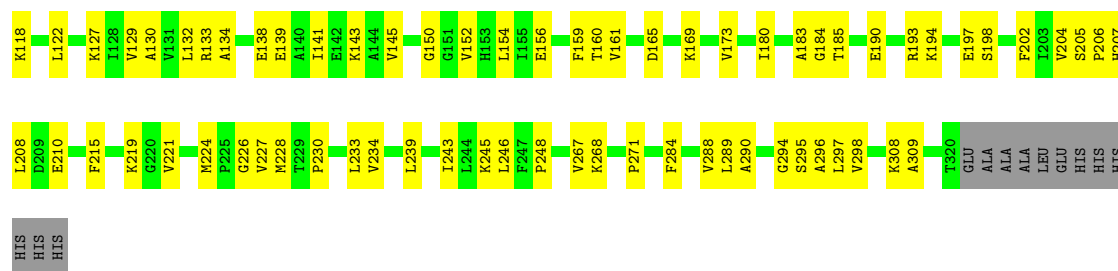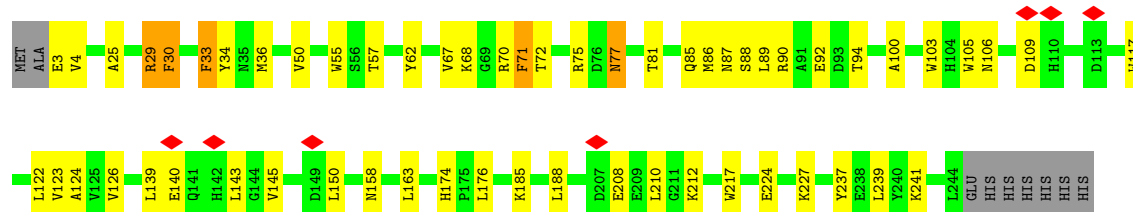• Molecule 1: H3-PrAC-5350A,2-dehydro-3-deoxyphosphogluconate aldolase/4-hydroxy-2-oxoglu tarate aldolase

Chain A:

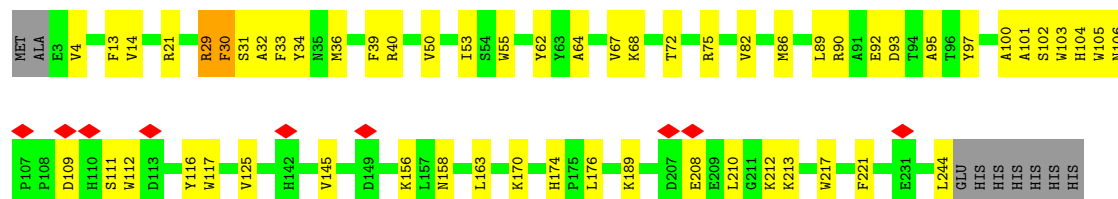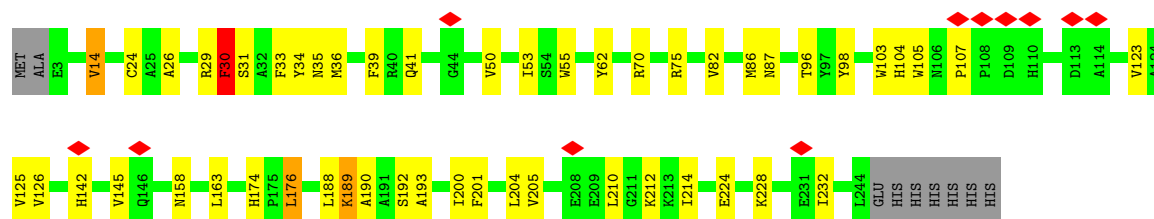• Molecule 1: H3-PrAC-5350A,2-dehydro-3-deoxyphosphogluconate aldolase/4-hydroxy-2-oxoglu tarate aldolase

Chain B:

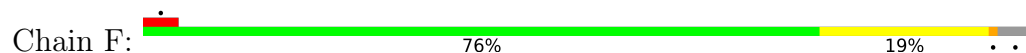• Molecule 1: H3-PrAC-5350A,2-dehydro-3-deoxyphosphogluconate aldolase/4-hydroxy-2-oxoglu tarate aldolase

Chain C:

K118 L122 K127 I128 V129 A130 V131 L132 R133 A134 E138 E139 A140 I141 E142 K143 A144 V145 G150 G151 V152 H153 L154 I155 E156 F159 T160 V161 D165 K169 V173 I180 A183 G184 T185 E190 R193 K194 E197 S198 F202 I203 V204 S205 P206 H207

L208 D209 E210 F215 K219 G220 V221 M224 P225 G226 V227 M228 T229 P230 L233 V234 L239 I243 L244 K245 L246 F247 P248 V267 K268 P271 F284 V288 L289 A290 G294 S295 A296 L297 V298 K308 A309 T320 GLU ALA ALA LEU GLU HIS HIS HIS

HIS HIS HIS

• Molecule 2: N4-nanobody-TAIL

Chain D:

73%　　　　21%

MET ALA E3 V4 A25 R29 F30 F33 Y34 N35 M36 V50 W55 S56 T57 Y62 V67 K68 G69 R70 F71 T72 R75 D76 N77 T81 Q85 M86 N87 S88 L89 R90 A91 E92 D93 T94 A100 W103 H104 W105 N106 D109 H110 D113 W117

L122 V123 A124 V125 V126 L139 E140 Q141 H142 L143 G144 V145 D149 L150 N158 L163 H174 P175 L176 K185 L188 D207 E208 E209 L210 G211 K212 W217 E224 K227 Y237 E238 L239 Y240 K241 L244 GLU HIS HIS HIS HIS HIS

• Molecule 2: N4-nanobody-TAIL

Chain E:

73%　　　　22%

MET ALA E3 V4 F13 V14 R21 R29 F30 S31 A32 F33 Y34 N35 M36 F39 R40 V50 I53 S54 W55 Y62 Y63 A64 V67 K68 T72 R75 V82 M86 L89 R90 A91 E92 D93 T94 A95 T96 Y97 A100 A101 S102 W103 H104 W105 N106

P107 P108 D109 H110 S111 W112 D113 Y116 W117 V125 H142 V145 D149 K156 L157 N158 L163 K170 H174 P175 L176 K189 D207 E208 E209 L210 G211 K212 K213 W217 F221 E231 L244 GLU HIS HIS HIS HIS HIS

• Molecule 2: N4-nanobody-TAIL

Chain F:

76%　　　　19%

MET ALA E3 V14 C24 A25 A26 R29 F30 S31 A32 F33 Y34 N35 M36 F39 R40 Q41 G44 V50 I53 S54 W55 Y62 R70 R75 V82 M86 N87 T96 Y97 Y98 W103 H104 W105 N106 P107 P108 D109 H110 D113 A114 V123 A124

V125 V126 H142 V145 Q146 N158 L163 H174 P175 L176 L188 K189 A190 A191 S192 A193 I200 F201 L204 V205 E208 E209 L210 G211 K212 K213 I214 E224 K228 E231 I232 L244 GLU HIS HIS HIS HIS HIS

• Molecule 3: Nectin-4

Chain G:

11%　　51%　　　　37%　　5% · 6%

MET G2 E3 L4 E5 T6 S7 V12 V13 L14 G15 Q16 L20 P21 C22 F23 Y24 R25 G26 D27 S28 G29 E30 Q31 Q34 W37 V40 D41 A42 G43 E44 G45 A46 Q47 E48 L49 A50 L51 L52 H53 S54 K55 Y56 G57 L58 H59 Y64 E65 G66 R67 V68 E69 Q70

• Molecule 3: Nectin-4

Chain H:

• Molecule 3: Nectin-4

Chain I:

4 Experimental information ⓘ

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	567049	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 $(e^-/\text{Å}^2)$	60	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	2.044	Depositor
Minimum map value	-0.002	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.032	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	264.96, 264.96, 264.96	wwPDB
Map dimensions	288, 288, 288	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.91999996, 0.91999996, 0.91999996	Depositor

5   Model quality ⓘ

5.1   Standard geometry ⓘ

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	A	0.15	0/2457	0.41	1/3309 (0.0%)
1	B	0.13	0/2457	0.39	2/3309 (0.1%)
1	C	0.13	0/2457	0.39	0/3309
2	D	0.38	0/1915	0.74	6/2594 (0.2%)
2	E	0.28	0/1915	0.58	4/2594 (0.2%)
2	F	0.35	0/1915	0.65	3/2594 (0.1%)
3	G	0.46	0/905	0.98	8/1230 (0.7%)
3	H	0.39	0/905	0.86	2/1230 (0.2%)
3	I	0.35	0/905	0.74	2/1230 (0.2%)
All	All	0.28	0/15831	0.60	28/21399 (0.1%)

There are no bond length outliers.

The worst 5 of 28 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	E	30	PHE	CA-CB-CG	10.37	124.17	113.80
2	D	71	PHE	CA-CB-CG	8.61	122.41	113.80
2	F	30	PHE	CA-CB-CG	7.86	121.66	113.80
2	D	33	PHE	N-CA-C	-7.83	101.95	114.09
2	E	31	SER	N-CA-C	7.76	122.80	112.25

There are no chirality outliers.

There are no planarity outliers.

5.2   Too-close contacts ⓘ

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	A	2424	0	2533	73	0
1	B	2424	0	2533	63	0
1	C	2424	0	2533	79	0
2	D	1872	0	1843	49	0
2	E	1872	0	1843	51	0
2	F	1872	0	1843	47	0
3	G	887	0	858	55	0
3	H	887	0	858	42	0
3	I	887	0	858	50	0
All	All	15549	0	15702	447	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 14.

The worst 5 of 447 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)
3:G:58:LEU:CD1	3:G:70:GLN:HG3	2.06	0.85
2:D:75:ARG:HD3	2:D:77:ASN:OD1	1.79	0.83
2:D:29:ARG:HD2	3:G:59:HIS:CD2	2.13	0.83
1:A:230:PRO:HG3	1:A:260:MET:HE1	1.62	0.82
3:G:53:HIS:HD1	3:G:56:TYR:HD2	1.27	0.82

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	317/332 (96%)	312 (98%)	5 (2%)	0	100	100
1	B	317/332 (96%)	312 (98%)	5 (2%)	0	100	100
1	C	317/332 (96%)	311 (98%)	6 (2%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	D	240/251 (96%)	236 (98%)	4 (2%)	0	100	100
2	E	240/251 (96%)	236 (98%)	4 (2%)	0	100	100
2	F	240/251 (96%)	236 (98%)	4 (2%)	0	100	100
3	G	114/123 (93%)	108 (95%)	6 (5%)	0	100	100
3	H	114/123 (93%)	104 (91%)	10 (9%)	0	100	100
3	I	114/123 (93%)	107 (94%)	7 (6%)	0	100	100
All	All	2013/2118 (95%)	1962 (98%)	51 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2   Protein sidechains ⓘ

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	A	258/268 (96%)	254 (98%)	4 (2%)	58	71
1	B	258/268 (96%)	254 (98%)	4 (2%)	58	71
1	C	258/268 (96%)	253 (98%)	5 (2%)	52	65
2	D	186/194 (96%)	183 (98%)	3 (2%)	58	71
2	E	186/194 (96%)	185 (100%)	1 (0%)	86	92
2	F	186/194 (96%)	180 (97%)	6 (3%)	34	45
3	G	93/100 (93%)	86 (92%)	7 (8%)	11	13
3	H	93/100 (93%)	87 (94%)	6 (6%)	14	17
3	I	93/100 (93%)	90 (97%)	3 (3%)	34	45
All	All	1611/1686 (96%)	1572 (98%)	39 (2%)	45	57

5 of 39 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	G	64	TYR
3	H	111	LEU

Continued on next page...

WORLDWIDE
wwPDB
PROTEIN DATA BANK

Continued from previous page...

Mol	Chain	Res	Type
3	G	115	VAL
3	H	65	GLU
3	I	60	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (3) such sidechains are listed below:

Mol	Chain	Res	Type
2	D	77	ASN
2	E	80	ASN
3	H	59	HIS

5.3.3   RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5   Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6   Ligand geometry ⓘ

There are no ligands in this entry.

5.7   Other polymers ⓘ

There are no such residues in this entry.

5.8   Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Map visualisation ⓘ

This section contains visualisations of the EMDB entry EMD-64047. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections ⓘ

6.1.1 Primary map

| X | Y | Z |
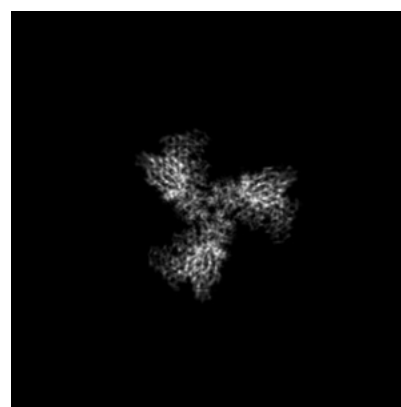
The images above show the map projected in three orthogonal directions.

6.2 Central slices ⓘ

6.2.1 Primary map

| X Index: 144 | Y Index: 144 | Z Index: 144 |
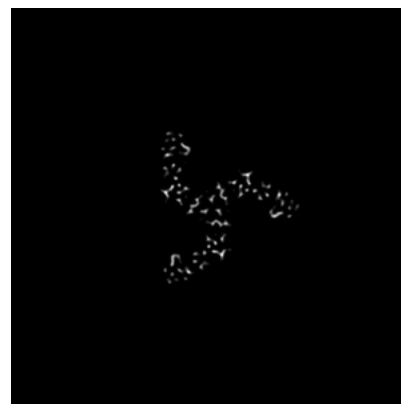
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices ⓘ

6.3.1 Primary map

| X Index: 132 | Y Index: 163 | Z Index: 191 |

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

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

6.4.1 Primary map

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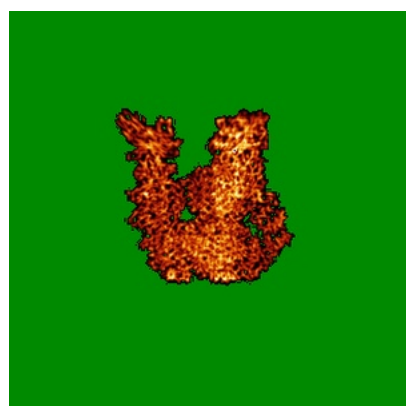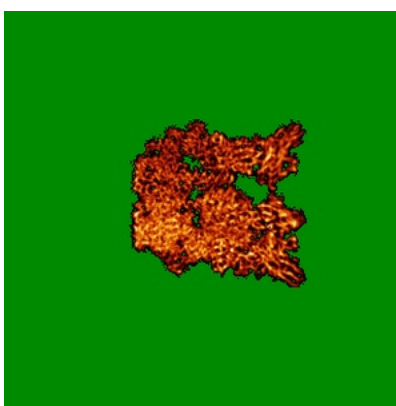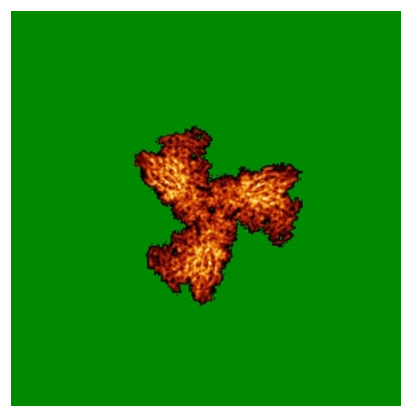
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5   Orthogonal surface views ⓘ

6.5.1   Primary map

X   Y   Z
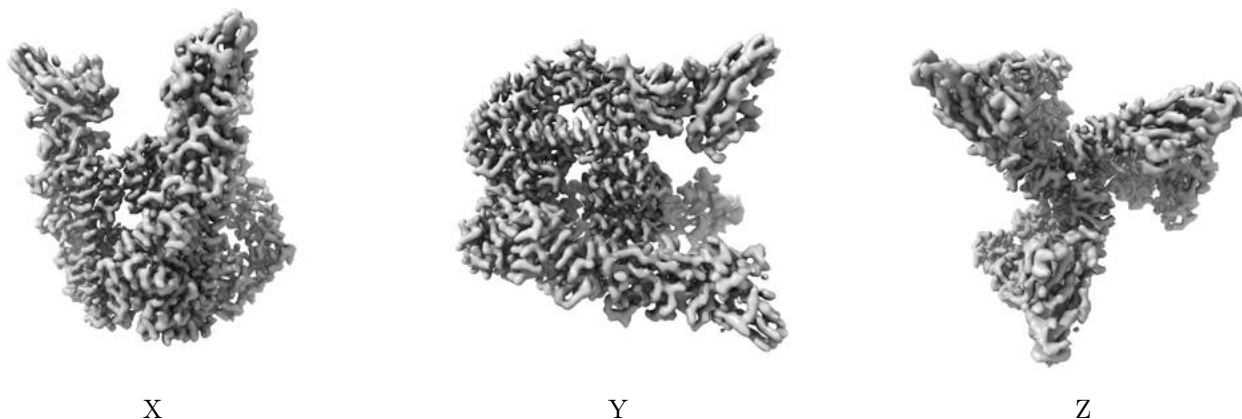
The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.6   Mask visualisation ⓘ

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

7   Map analysis ⓘ

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

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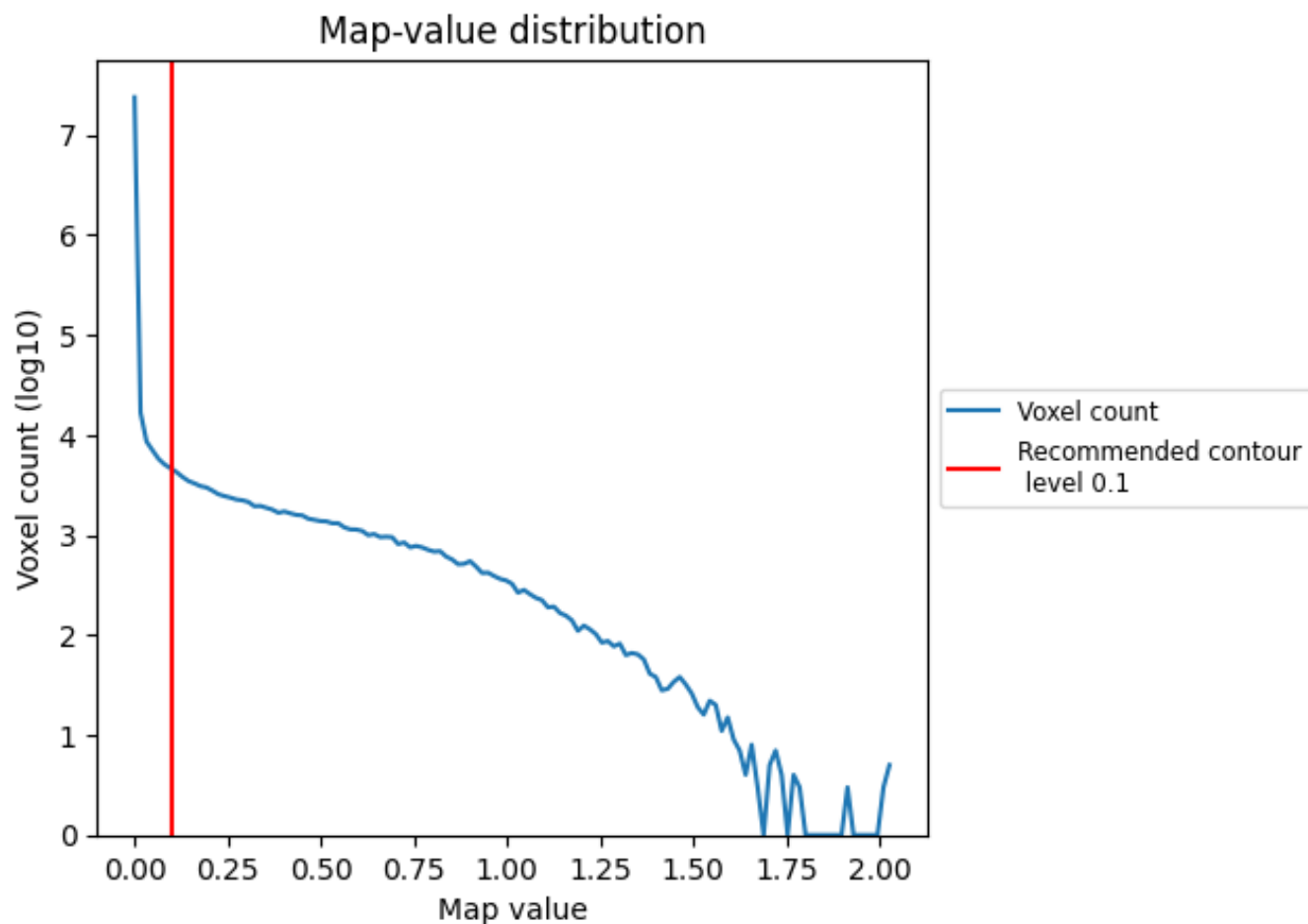
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2   Volume estimate ⓘ
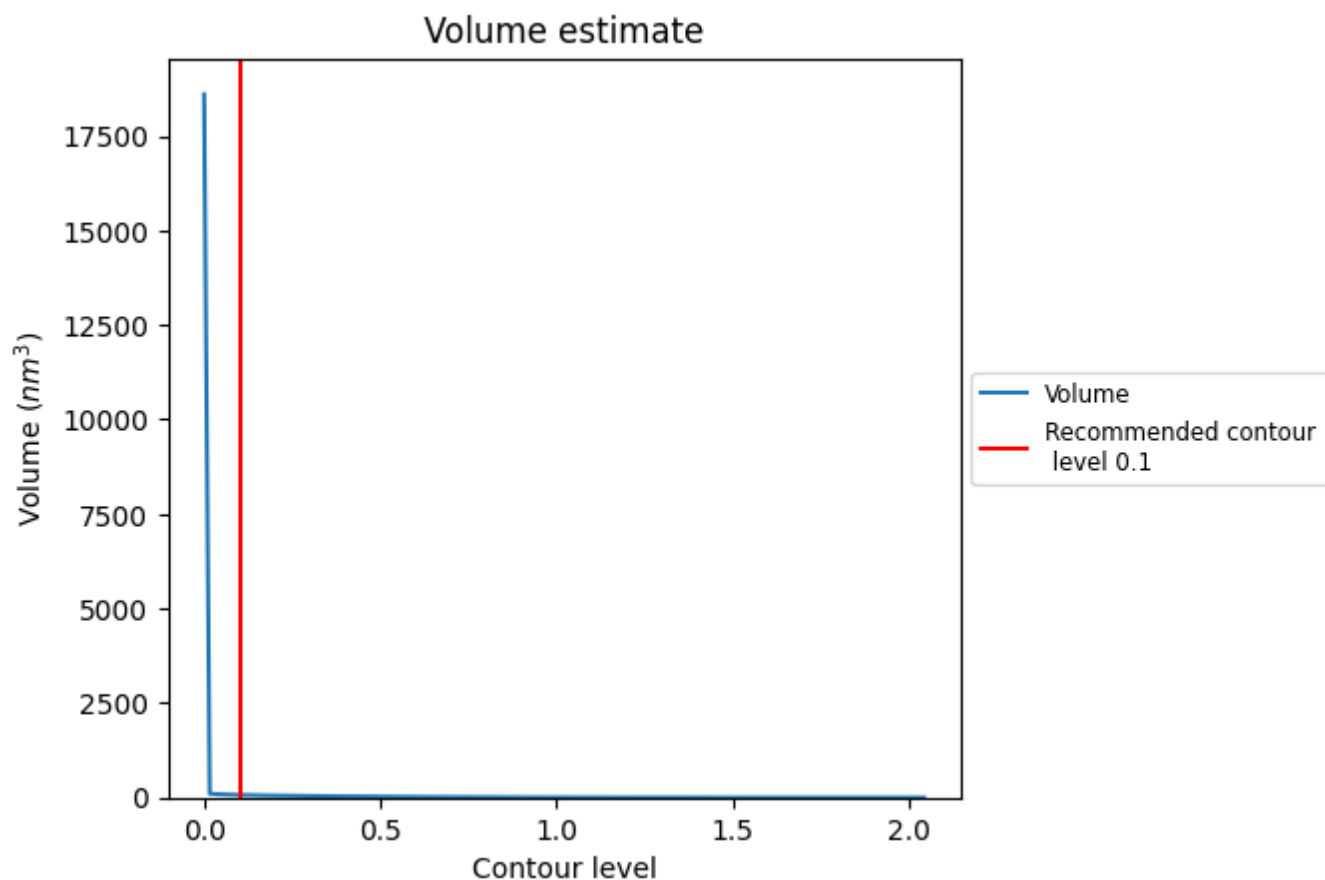
The volume at the recommended contour level is 70 nm^3; this corresponds to an approximate mass of 63 kDa.

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 ⓘ
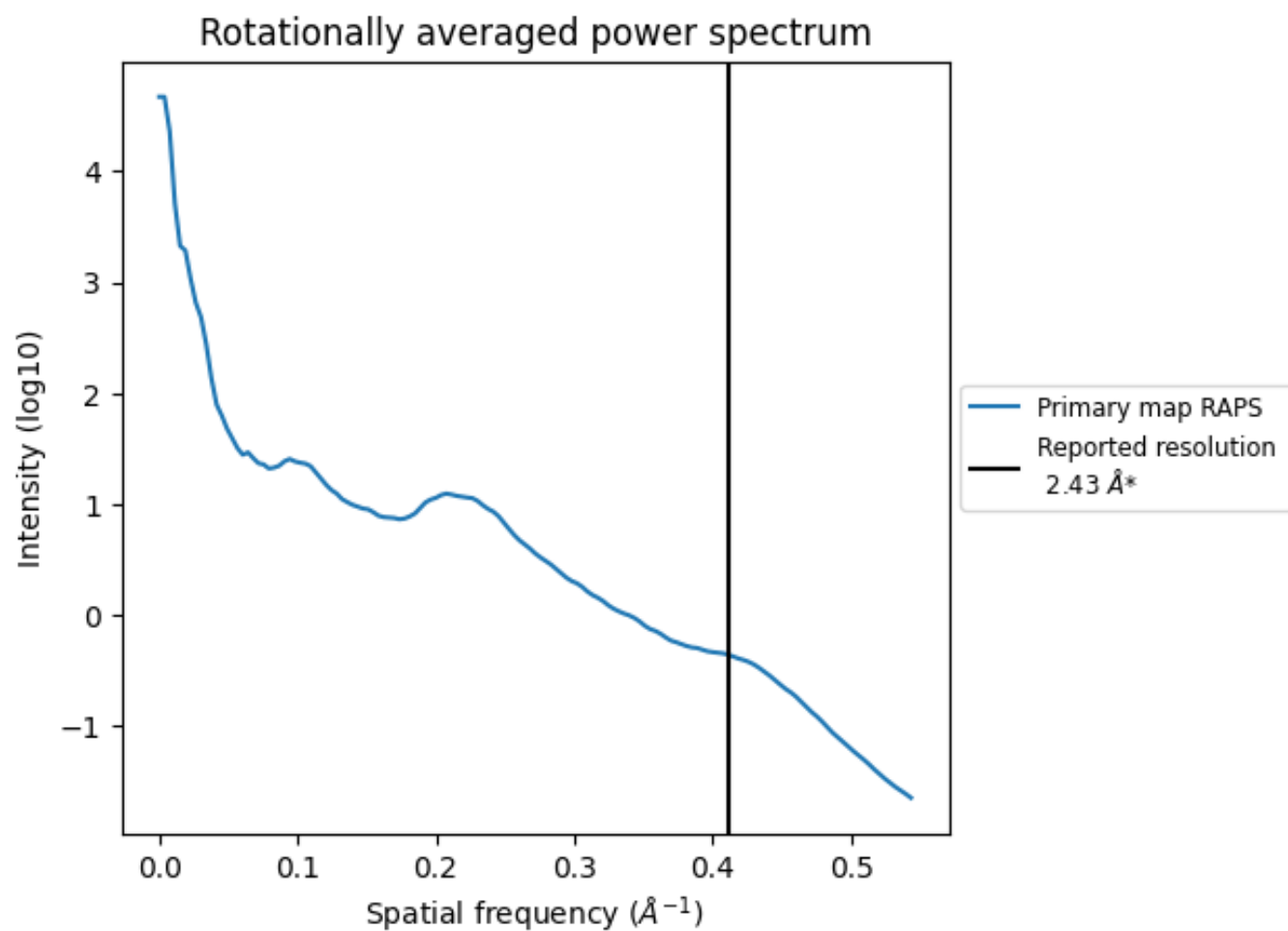
*Reported resolution corresponds to spatial frequency of 0.412 Å^{-1}

8 Fourier-Shell correlation ⓘ

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

9 Map-model fit ⓘ

This section contains information regarding the fit between EMDB map EMD-64047 and PDB model 9UCL. Per-residue inclusion information can be found in section 3 on page 7.
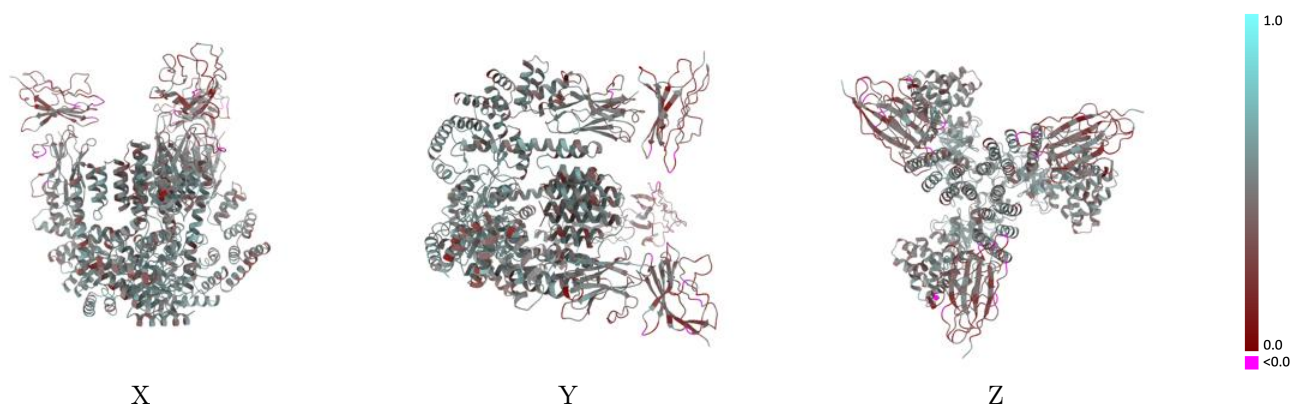
9.1 Map-model overlay ⓘ
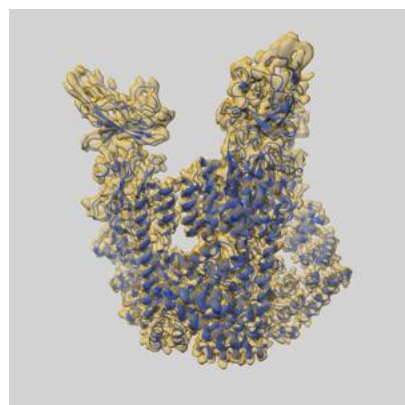
X　　　　　　　　　　　　　　Y　　　　　　　　　　　　　　Z
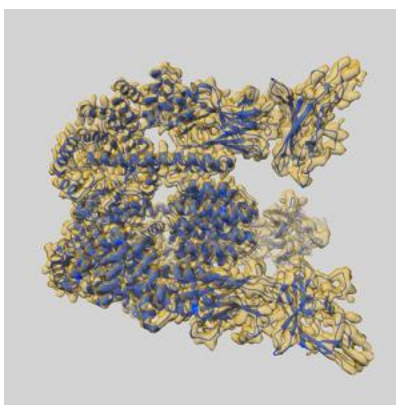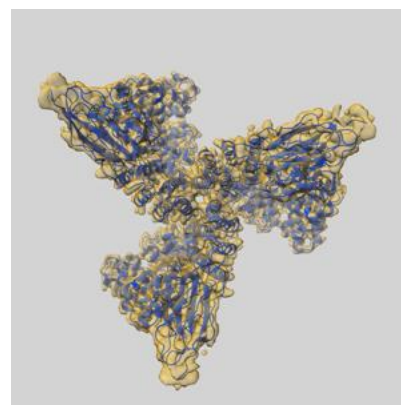
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2　Q-score mapped to coordinate model　ⓘ

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

9.3　Atom inclusion mapped to coordinate model　ⓘ
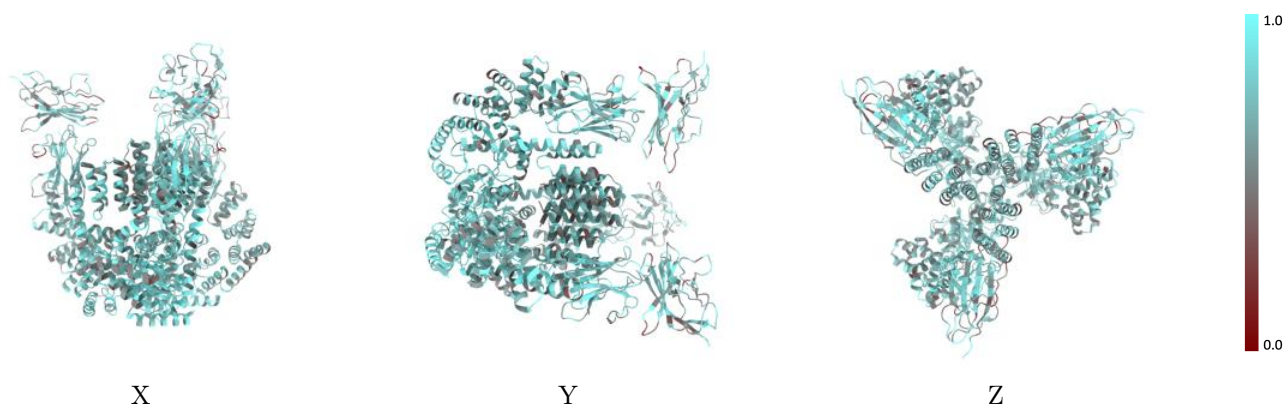
The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.1).

9.4 Atom inclusion ⓘ
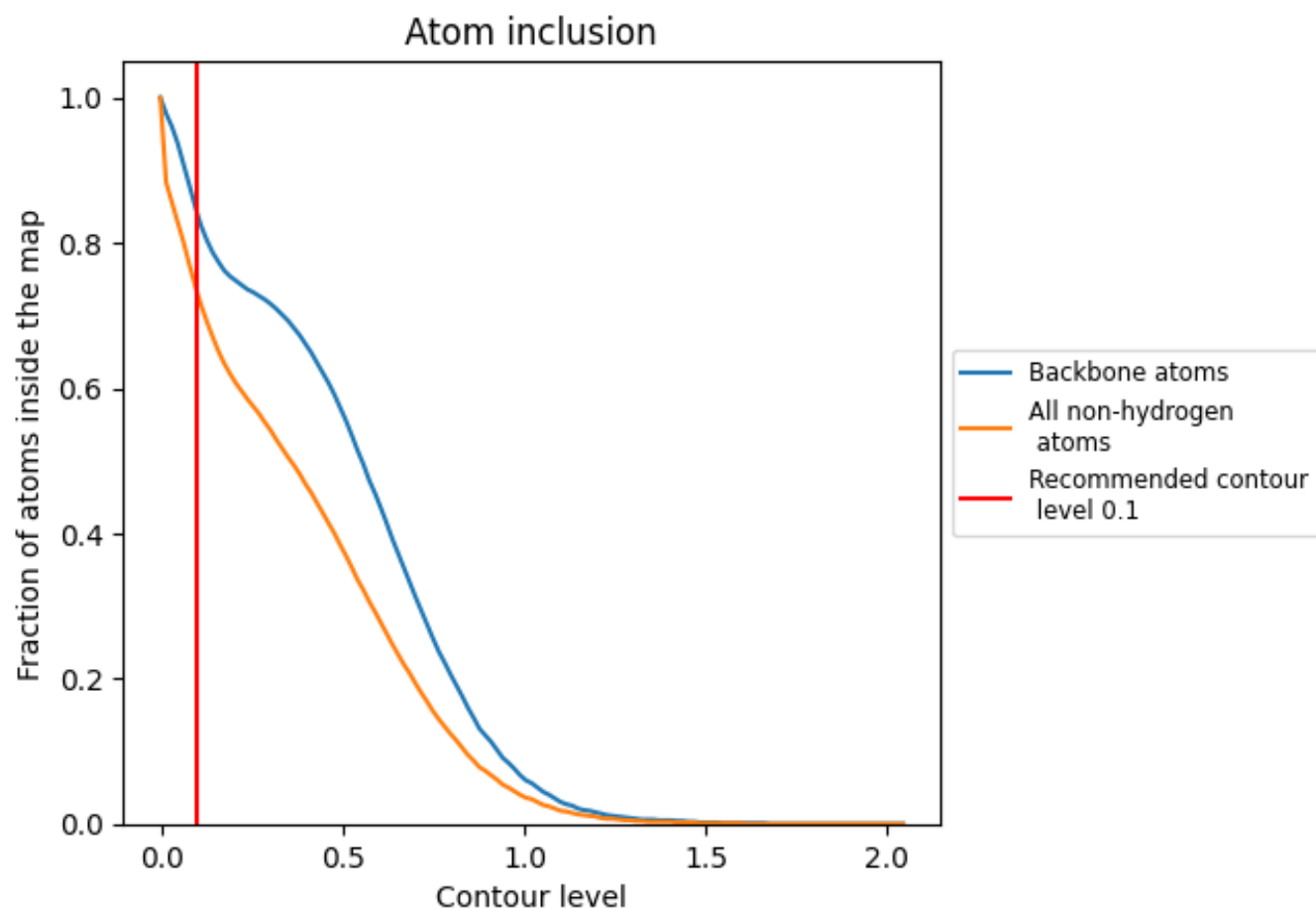
At the recommended contour level, 84% of all backbone atoms, 73% of all non-hydrogen atoms, are inside the map.

9.5　Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7310	0.4520
A	0.7740	0.5100
B	0.7680	0.5150
C	0.7710	0.5150
D	0.7170	0.4460
E	0.7150	0.4480
F	0.7210	0.4510
G	0.6600	0.3050
H	0.6640	0.3040
I	0.6270	0.2760

1.0

0.0
<0.0