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PROTEIN DATA BANK

wwPDB EM Validation Summary Report (i)

Nov 29, 2022 – 04:04 AM JST

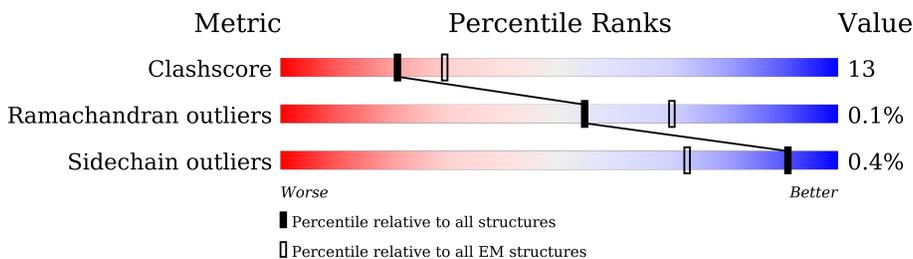|		
PDB ID	:	7WLL
EMDB ID	:	EMD-32587
Title	:	CryoEM structure of human low-voltage activated T-type calcium channel Cav3.3 in complex with pimozide(PMZ)
Authors	:	He, L.; Yu, Z.; Dong, Y.; Chen, Q.; Zhao, Y.
Deposited on	:	2022-01-13
Resolution	:	3.60 Å(reported)

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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 3.60 Å.

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

Metric	Percentile Ranks	Value
Clashscore		13
Ramachandran outliers		0.1%
Sidechain outliers		0.4%

Worse   *Better*

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

Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=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	2223	9% 36% 15% 49%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

| Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
5	Y01	A	2312	X	-	-	-

2 Entry composition ⓘ

There are 6 unique types of molecules in this entry. The entry contains 9540 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 Voltage-dependent T-type calcium channel subunit alpha-1I.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	1135	9111	5979	1499	1555	78	1	0

- Molecule 2 is 3-[1-[4,4-bis(4-fluorophenyl)butyl]piperidin-4-yl]-1 {H}-benzimidazol-2-one (three-letter code: 1II) (formula: $C_{28}H_{29}F_2N_3O$).
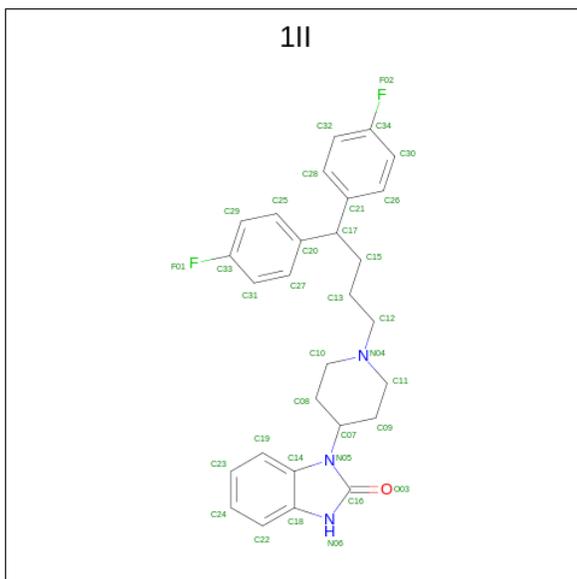
Mol	Chain	Residues	Atoms					AltConf
			Total	C	F	N	O	
2	A	1	34	28	2	3	1	0

- Molecule 3 is 1,2-Distearoyl-sn-glycerophosphoethanolamine (three-letter code: 3PE) (formula: $C_{41}H_{82}NO_8P$).

3PE

Mol	Chain	Residues	Atoms				AltConf
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	
3	A	1	Total	C	O	P	0
			134	125	8	1	

- Molecule 4 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
4	A	2	Total	Ca	0
			2	2	

- Molecule 5 is CHOLESTEROL HEMISUCCINATE (three-letter code: Y01) (formula: $C_{31}H_{50}O_4$).
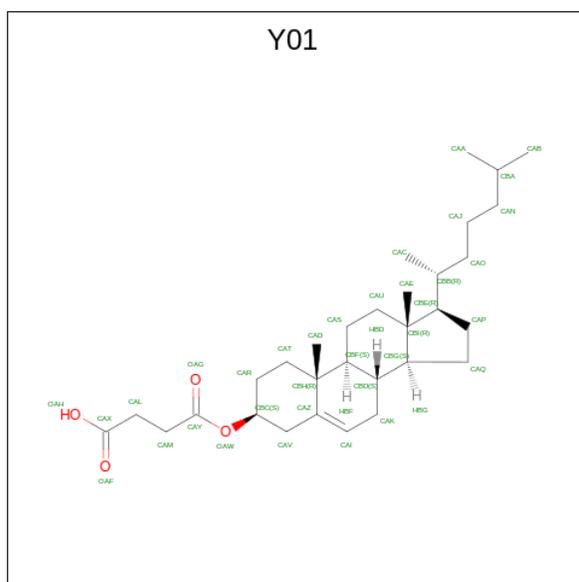
Mol	Chain	Residues	Atoms			AltConf
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0
5	A	1	Total 231	C 210	O 21	0

- Molecule 6 is 2-acetamido-2-deoxy-beta-D-glucopyranose (three-letter code: NAG) (formula: $C_8H_{15}NO_6$).

NAG

Mol	Chain	Residues	Atoms				AltConf
6	A	1	Total	C	N	O	0
			28	16	2	10	
6	A	1	Total	C	N	O	0
			28	16	2	10	

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: Voltage-dependent T-type calcium channel subunit alpha-1I

GLN GLY SER TRP ALA SER LEU ARG SER PRO ARG VAL ASN CYS THR LEU LEU ARG GLN ALA THR GLY SER ASP THR SER LEU ASP ALA SER PRO SER SER SER ALA GLY SER LEU SER LEU GLN THR THR LEU GLU ASP SER LEU THR LEU SER ASP SER PRO ARG ARG ALA LEU LEU GLY PRO PRO ALA

PRO ALA PRO GLY PRO ARG ALA ALA GLY LEU SER SER PRO ALA ALA ARG ARG LEU ARG SER LEU ARG GLY LEU ARG GLY LEU PHE SER LEU ARG GLY LEU LEU ARG ALA HIS GLN ARG SER HIS SER GLY GLY LEU SER THR SER PRO GLY CYS THR HIS HIS ASP SER MET ASP PRO SER ASP GLU GLU GLY

ARG GLY GLY ALA GLY GLY GLY ALA SER GLU GLU HIS SER GLU THR LEU SER LEU SER THR SER LEU THR LEU SER LEU PHE CYS PRO PRO PRO PRO PRO ALA PRO GLY LEU THR PRO ALA ARG LYS PHE SER SER THR SER LEU ALA PRO GLY ARG PRO HIS ALA ALA LEU

ALA HIS GLY LEU ALA ARG SER PRO SER TRP ALA ALA ASP ARG SER LYS ASP PRO PRO GLY ARG ALA PRO LEU PRO MET GLY LEU GLY PRO LEU ALA PRO PRO PRO GLN PRO LEU THR PRO GLY LEU GLU LEU PRO GLY ASP ALA ALA SER LYS ARG LYS ARG

4 Experimental information ⓘ

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	1623565	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/Å^2)$	9.6	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	3.674	Depositor
Minimum map value	-2.404	Depositor
Average map value	-0.004	Depositor
Map value standard deviation	0.106	Depositor
Recommended contour level	0.65	Depositor
Map size (Å)	266.24, 266.24, 266.24	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.04, 1.04, 1.04	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: Y01, CA, 1II, 3PE, NAG

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	0.37	0/9314	0.51	0/12625

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 ⓘ

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	9111	0	9291	240	0
2	A	34	0	0	1	0
3	A	134	0	209	7	0
4	A	2	0	0	0	0
5	A	231	0	331	25	0
6	A	28	0	26	1	0
All	All	9540	0	9857	258	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 13.

The worst 5 of 258 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:332:ASN:HD22	1:A:339:ASN:ND2	1.41	1.17
1:A:332:ASN:ND2	1:A:339:ASN:HD22	1.46	1.13
1:A:236:ARG:HG2	1:A:332:ASN:OD1	1.46	1.13
1:A:1183:ASN:O	1:A:1186:THR:HG22	1.52	1.07
1:A:1474:CYS:H	1:A:1478:LEU:HB3	1.35	0.91

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	A	1128/2223 (51%)	1045 (93%)	82 (7%)	1 (0%)	51	83

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1441	GLN

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	1006/1879 (54%)	1002 (100%)	4 (0%)	91	97

All (4) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	1426	PHE
1	A	1436	LYS
1	A	1438	ARG
1	A	1455	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (5) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	100	GLN
1	A	339	ASN
1	A	850	ASN
1	A	1183	ASN
1	A	1500	ASN

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 monosaccharides in this entry.

5.6   Ligand geometry ⓘ

Of 21 ligands modelled in this entry, 2 are monoatomic - leaving 19 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#$|Z| > 2$	Counts	RMSZ	#$|Z| > 2$
5	Y01	A	2312	-	38,38,38	0.72	1 (2%)	57,57,57	4.43	19 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\lvert Z\rvert > 2$	Counts	RMSZ	$\#\lvert Z\rvert > 2$
3	3PE	A	2310	-	11,11,50	1.48	0	10,10,55	0.89	0
5	Y01	A	2314	-	38,38,38	0.66	0	57,57,57	1.87	14 (24%)
6	NAG	A	2309	-	14,14,15	0.20	0	17,19,21	0.47	0
5	Y01	A	2317	-	38,38,38	0.71	1 (2%)	57,57,57	1.63	13 (22%)
6	NAG	A	2313	1	14,14,15	0.37	0	17,19,21	1.27	1 (5%)
3	3PE	A	2304	-	10,10,50	1.48	0	9,9,55	0.90	0
3	3PE	A	2320	-	13,13,50	1.50	0	12,12,55	0.89	0
5	Y01	A	2315	-	32,32,38	0.86	2 (6%)	49,49,57	1.61	10 (20%)
3	3PE	A	2316	-	11,11,50	1.53	0	10,10,55	0.84	0
2	1II	A	2301	-	38,38,38	2.79	8 (21%)	53,53,53	1.60	13 (24%)
5	Y01	A	2308	1	34,34,38	0.80	1 (2%)	52,52,57	1.69	11 (21%)
3	3PE	A	2321	-	9,9,50	1.46	0	8,8,55	0.81	0
3	3PE	A	2318	-	12,12,50	1.52	0	11,11,55	0.81	0
3	3PE	A	2305	-	11,11,50	1.48	0	10,10,55	0.94	0
3	3PE	A	2302	-	38,38,50	2.31	11 (28%)	42,43,55	1.17	2 (4%)
5	Y01	A	2319	-	38,38,38	0.71	1 (2%)	57,57,57	1.50	12 (21%)
3	3PE	A	2303	-	10,10,50	1.51	0	9,9,55	0.81	0
5	Y01	A	2311	-	34,34,38	0.70	1 (2%)	52,52,57	1.85	13 (25%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	Y01	A	2312	-	1/1/12/13	8/19/77/77	0/4/4/4
3	3PE	A	2310	-	-	4/9/9/54	-
5	Y01	A	2314	-	-	13/19/77/77	0/4/4/4
6	NAG	A	2309	-	-	2/6/23/26	0/1/1/1
5	Y01	A	2317	-	-	13/19/77/77	0/4/4/4
6	NAG	A	2313	1	-	5/6/23/26	0/1/1/1
3	3PE	A	2304	-	-	4/8/8/54	-
3	3PE	A	2320	-	-	3/11/11/54	-
5	Y01	A	2315	-	-	10/12/70/77	0/4/4/4
3	3PE	A	2316	-	-	4/9/9/54	-
2	1II	A	2301	-	-	6/18/28/28	0/5/5/5
5	Y01	A	2308	1	-	6/14/72/77	0/4/4/4
3	3PE	A	2321	-	-	2/7/7/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	3PE	A	2318	-	-	2/10/10/54	-
3	3PE	A	2305	-	-	3/9/9/54	-
3	3PE	A	2302	-	-	16/40/40/54	-
5	Y01	A	2319	-	-	4/19/77/77	0/4/4/4
3	3PE	A	2303	-	-	4/8/8/54	-
5	Y01	A	2311	-	-	11/14/72/77	0/4/4/4

The worst 5 of 26 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	2301	1II	C12-N04	-11.54	1.20	1.47
2	A	2301	1II	O03-C16	9.28	1.40	1.23
3	A	2302	3PE	O31-C31	4.85	1.47	1.33
3	A	2302	3PE	P-O13	4.77	1.73	1.54
3	A	2302	3PE	O21-C21	4.61	1.47	1.34

The worst 5 of 108 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	A	2312	Y01	CAE-CBI-CAU	-18.22	81.82	110.59
5	A	2312	Y01	CAE-CBI-CBE	-16.33	81.25	111.71
5	A	2312	Y01	CAE-CBI-CBG	-12.70	88.02	111.71
5	A	2312	Y01	CBG-CBI-CBE	8.88	110.59	100.07
5	A	2312	Y01	CAU-CBI-CBE	8.27	128.94	116.57

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
5	A	2312	Y01	CBI

5 of 120 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	2301	1II	C12-C13-C15-C17
2	A	2301	1II	C13-C15-C17-C21
5	A	2308	Y01	CAC-CBB-CBE-CBI
5	A	2311	Y01	CAC-CBB-CBE-CBI
5	A	2311	Y01	OAG-CAY-OAW-CBC

There are no ring outliers.

13 monomers are involved in 34 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	A	2312	Y01	3	0
3	A	2310	3PE	2	0
5	A	2314	Y01	4	0
5	A	2317	Y01	7	0
6	A	2313	NAG	1	0
3	A	2304	3PE	2	0
3	A	2320	3PE	1	0
5	A	2315	Y01	3	0
3	A	2316	3PE	3	0
2	A	2301	1II	1	0
5	A	2308	Y01	3	0
5	A	2319	Y01	2	0
5	A	2311	Y01	3	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand Y01 A 2312

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2310

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2314

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2317

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2304

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2320

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2315

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2316

Bond lengths

Bond angles

Torsions

Rings

Ligand 1II A 2301

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2308

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2321

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2318

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2305

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2302

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2319

Bond lengths

Bond angles

Torsions

Rings

Ligand 3PE A 2303

Bond lengths

Bond angles

Torsions

Rings

Ligand Y01 A 2311

Bond lengths

Bond angles

Torsions

Rings

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-32587. 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
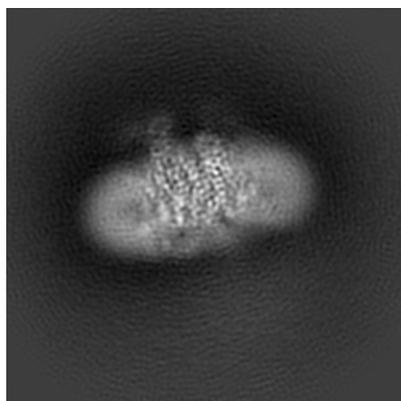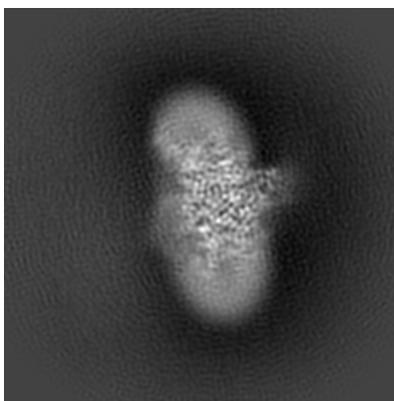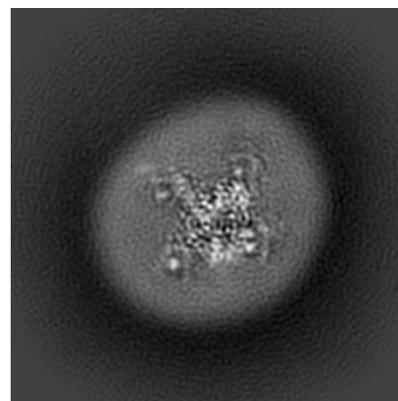
The images above show the map projected in three orthogonal directions.

6.2   Central slices ⓘ
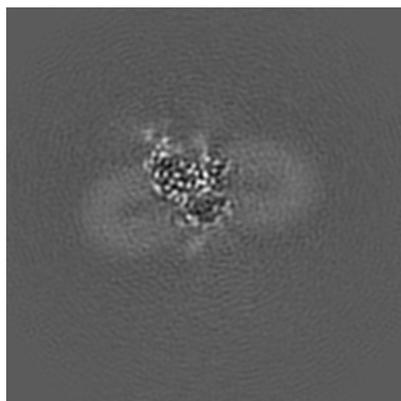
6.2.1   Primary map
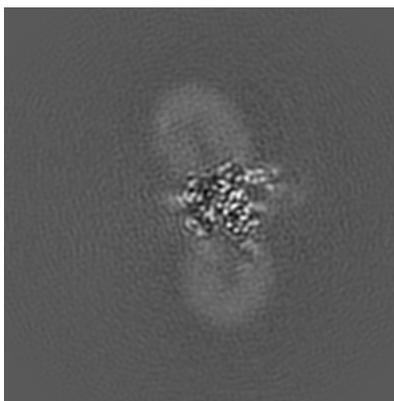
X Index: 128   Y Index: 128   Z Index: 128
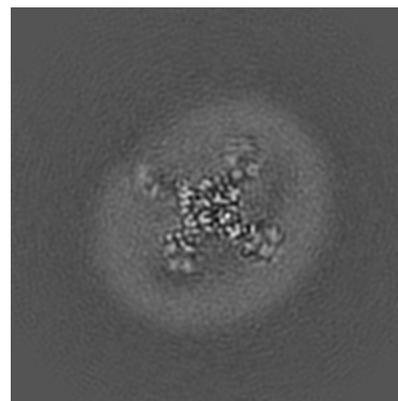
The images above show central slices of the map in three orthogonal directions.

6.3   Largest variance slices ⓘ
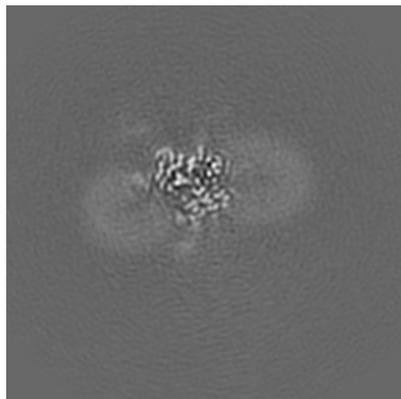
6.3.1   Primary map
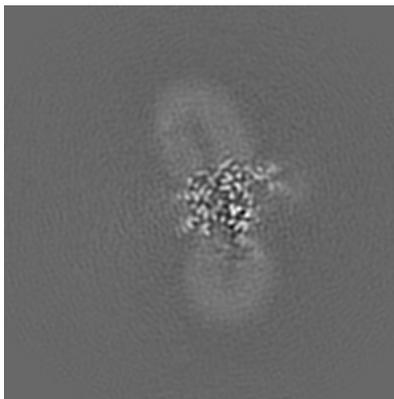
| X Index: 122 | Y Index: 130 | Z Index: 146 |
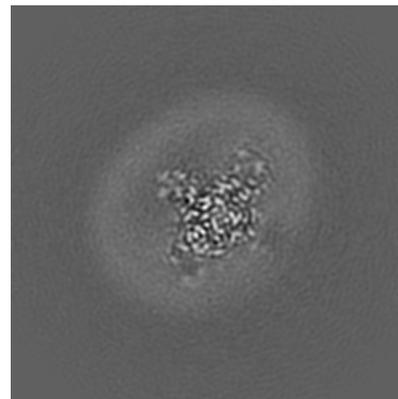
The images above show the largest variance slices of the map in three orthogonal directions.

6.4   Orthogonal surface views ⓘ
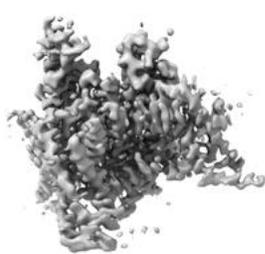
6.4.1   Primary map

| X | Y | Z |

The images above show the 3D surface view of the map at the recommended contour level 0.65. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5 Mask visualisation ⓘ

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

7   Map analysis   ⓘ

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

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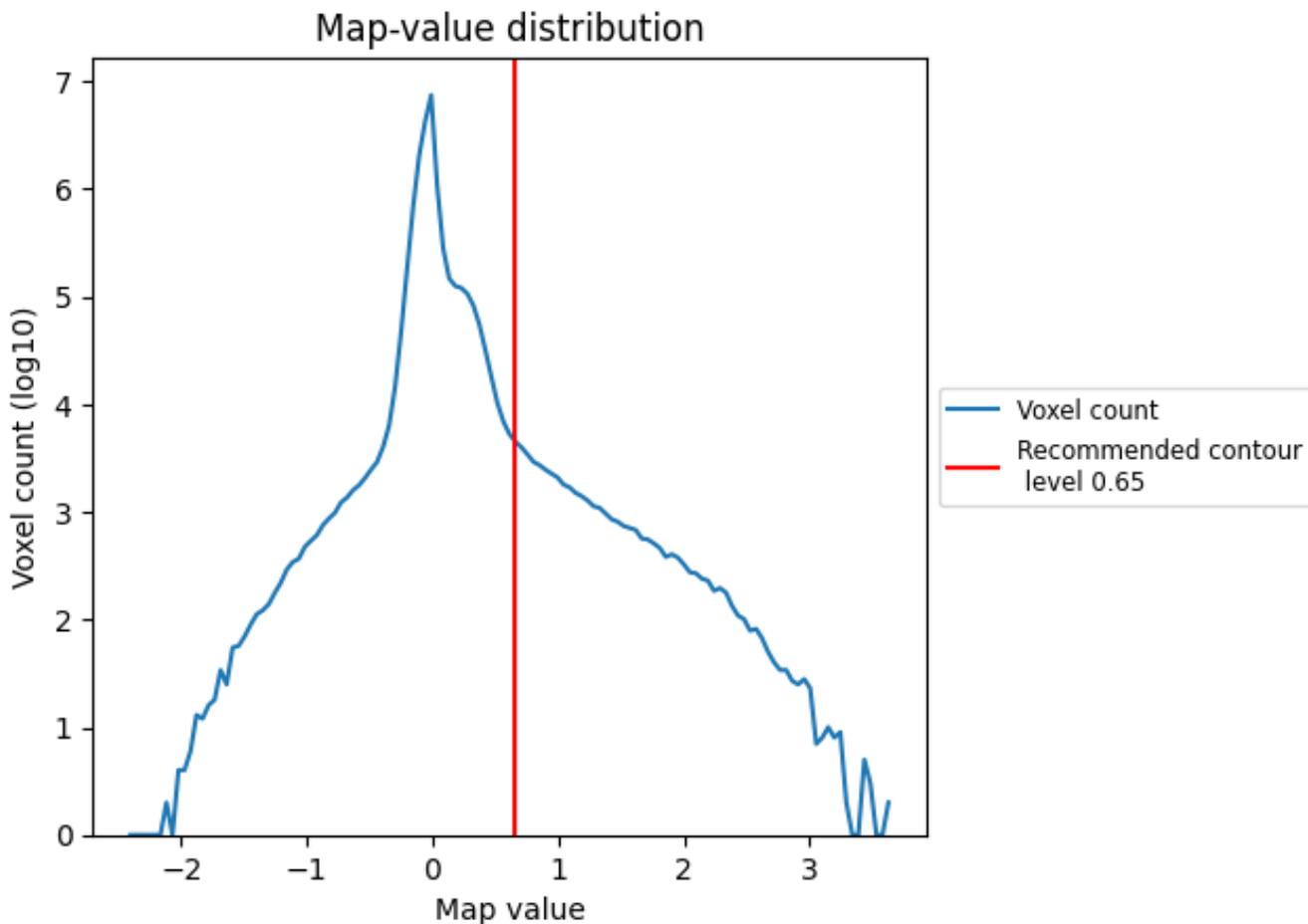
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate (i)
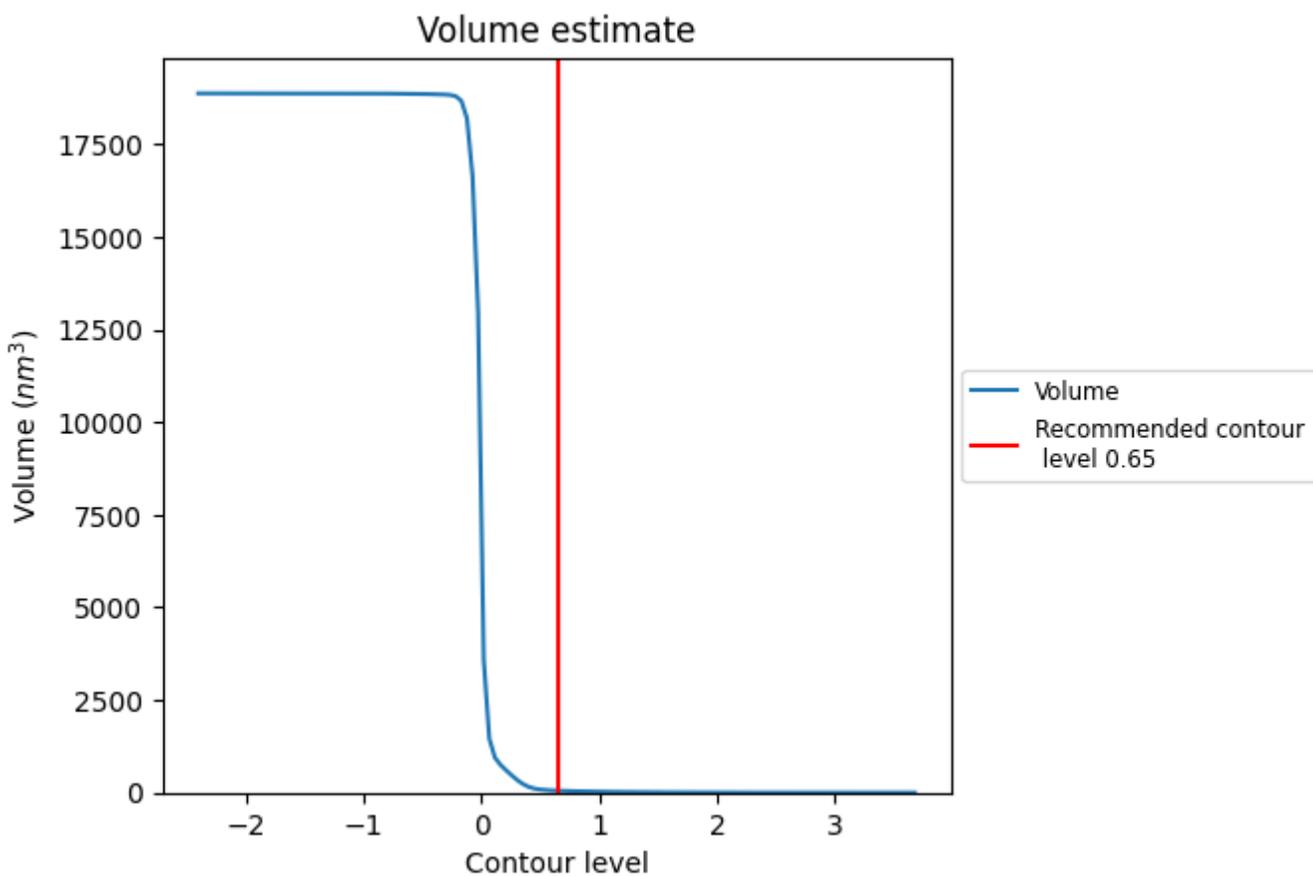
The volume at the recommended contour level is 52 nm^3; this corresponds to an approximate mass of 47 kDa.

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 ⓘ
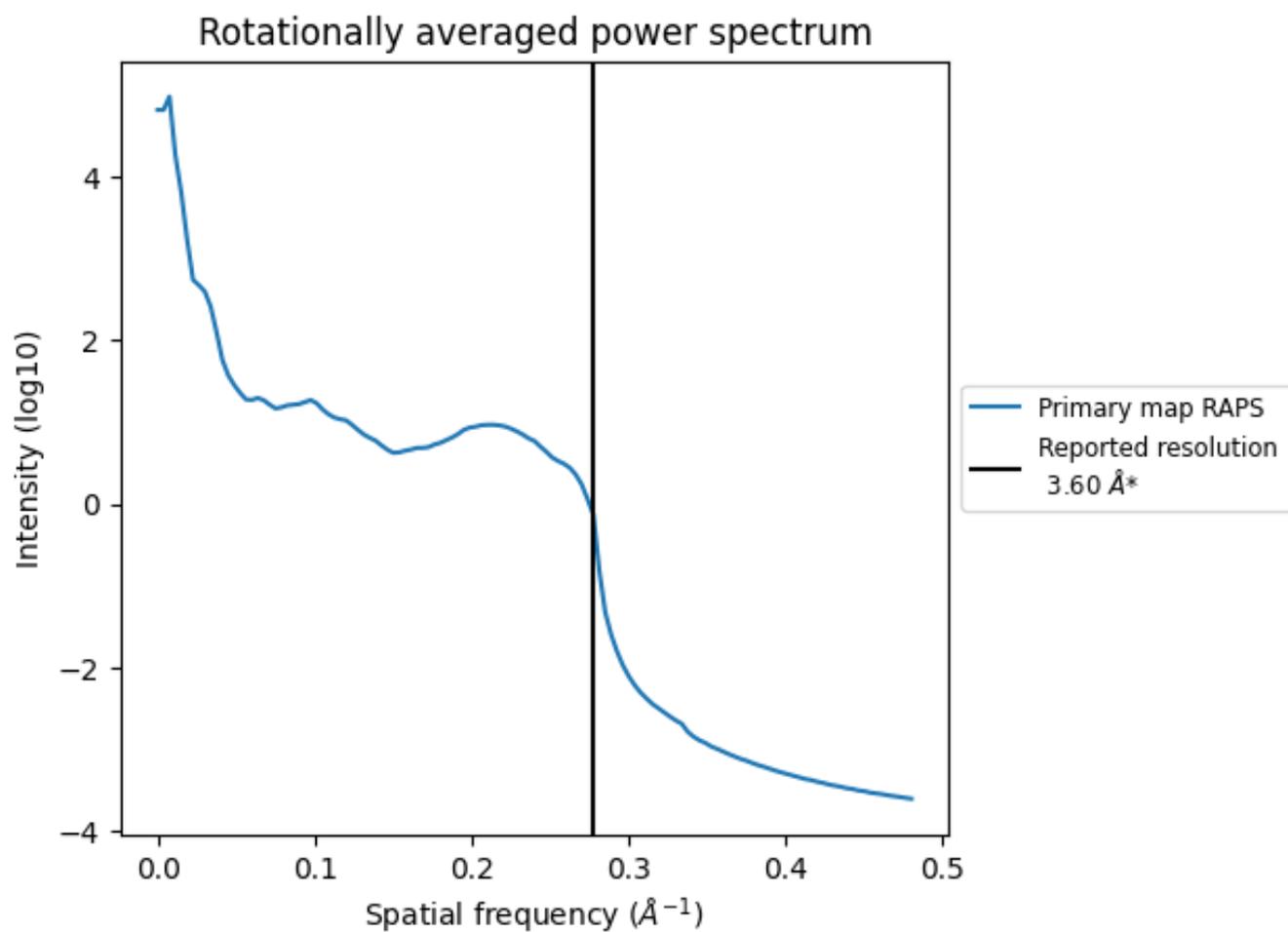
*Reported resolution corresponds to spatial frequency of 0.278 Å^{-1}

8 Fourier-Shell correlation ⓘ

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

9   Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-32587 and PDB model 7WLL. Per-residue inclusion information can be found in section 3 on page 7.
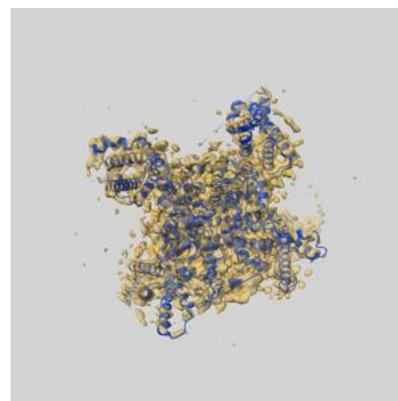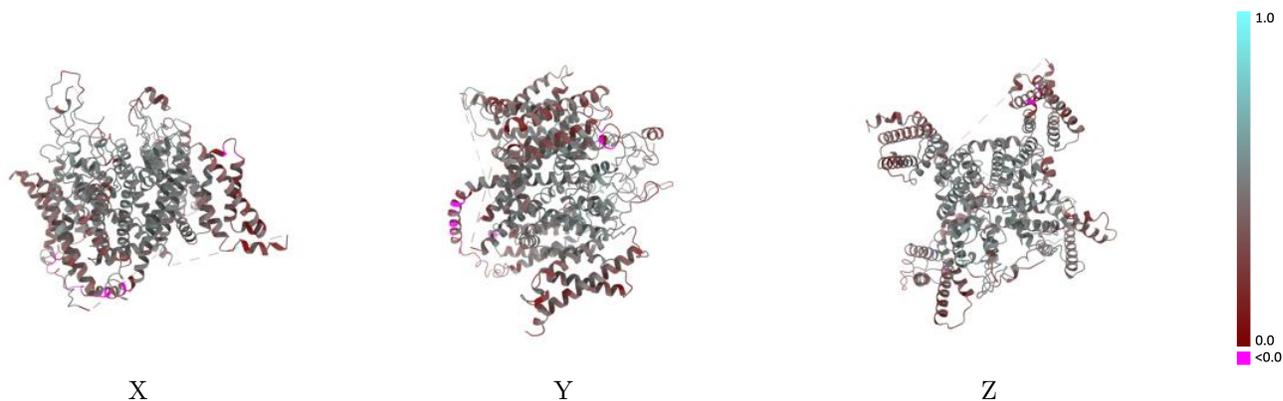
9.1   Map-model overlay (i)
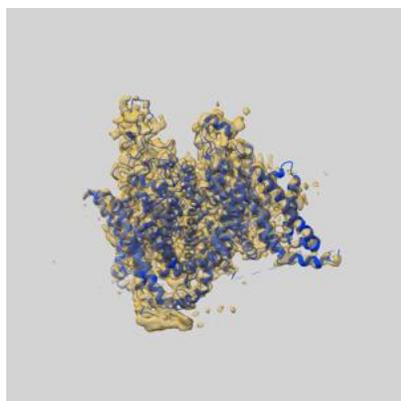

X   Y   Z
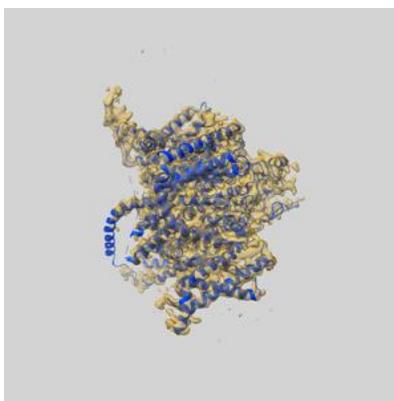
The images above show the 3D surface view of the map at the recommended contour level 0.65 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model ⓘ

| X | Y | Z |

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

9.3 Atom inclusion mapped to coordinate model ⓘ

| X | Y | Z |
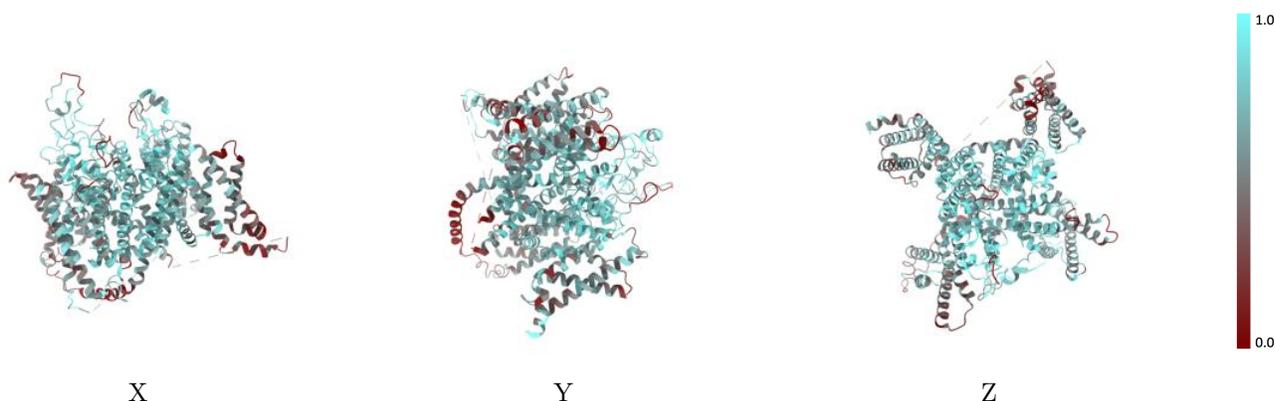
The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.65).

9.4   Atom inclusion ⓘ
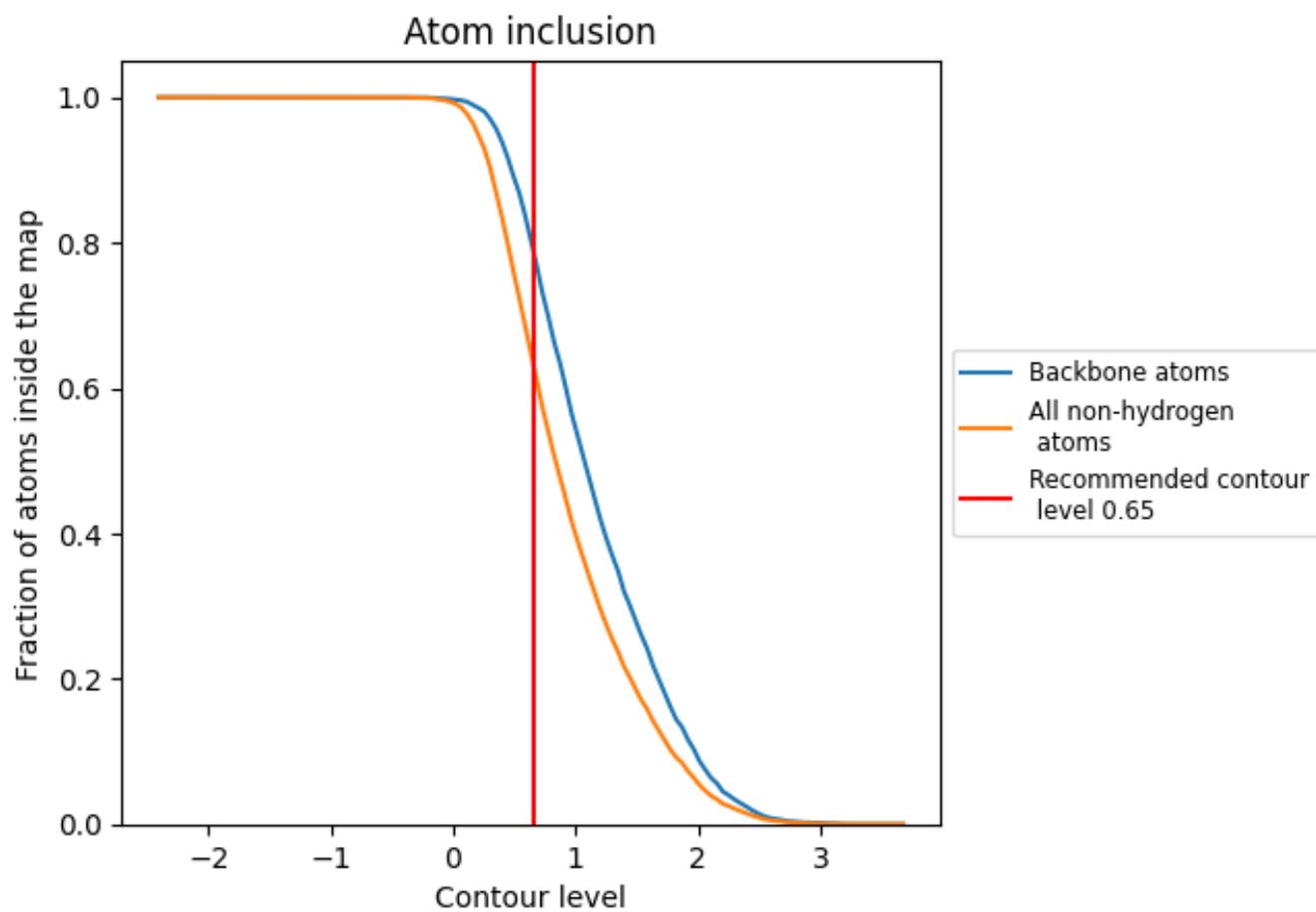
At the recommended contour level, 79% of all backbone atoms, 64% of all non-hydrogen atoms, are inside the map.

9.5   Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.65) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6356	0.4250
A	0.6356	0.4250