WORLDWIDE
wwPDB
PROTEIN DATA BANK

Full wwPDB EM Validation Report ⓘ

Nov 11, 2024 – 05:31 PM JST

PDB ID	:	7W55
EMDB ID	:	EMD-32314
Title	:	Cryo-EM structure of the neuromedin U-bound neuromedin U receptor 2-Gq protein complex
Authors	:	You, C.; Xu, H.E.; Jiang, Y.
Deposited on	:	2021-11-29
Resolution	:	2.80 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:
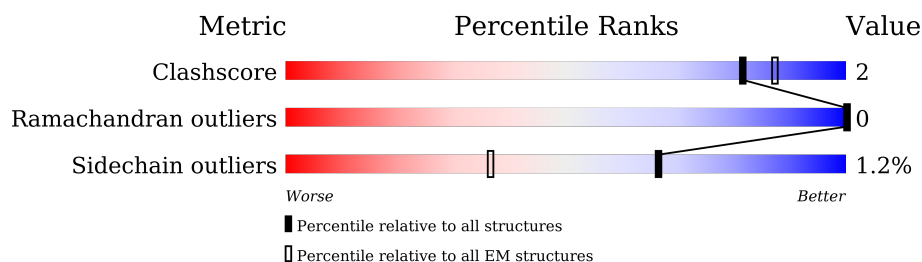
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

1 Overall quality at a glance ⓘ

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

The reported resolution of this entry is 2.80 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		2
Ramachandran outliers		0
Sidechain outliers		1.2%

Worse — *Better*

▮ Percentile relative to all structures
◻ Percentile relative to all EM structures

Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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

Mol	Chain	Length	Quality of chain
1	A	361	60% • 36%
2	B	345	90% 8% •
3	C	26	23% 12% 65%
4	E	248	87% 6% 7%
5	G	70	6% — 77% 23%
6	R	571	5% — 49% • 47%

2 Entry composition ⓘ

There are 6 unique types of molecules in this entry. The entry contains 18334 atoms, of which 9112 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 Guanine nucleotide-binding protein G(q) subunit alpha.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	A	232	Total 3799	C 1207	H 1891	N 338	O 355	S 8	0	0

- Molecule 2 is a protein called Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	B	338	Total 5108	C 1604	H 2508	N 467	O 508	S 21	0	0

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	1	MET	-	initiating methionine	UNP P62873
B	2	GLY	-	expression tag	UNP P62873
B	3	SER	-	expression tag	UNP P62873
B	4	LEU	-	expression tag	UNP P62873
B	5	LEU	-	expression tag	UNP P62873
B	6	GLN	-	expression tag	UNP P62873

- Molecule 3 is a protein called Neuromedin-U-25.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	9	Total 157	C 54	H 77	N 16	O 10	0	1

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	26	GLN	-	expression tag	UNP P48645

- Molecule 4 is a protein called scFv16.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
4	E	231	3493	1128	1717	294	344	10	0	0

- Molecule 5 is a protein called Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
5	G	54	827	253	420	71	80	3	0	0

- Molecule 6 is a protein called Neuromedin-U receptor 2.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
6	R	303	4950	1643	2499	394	401	13	0	0

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: Guanine nucleotide-binding protein G(q) subunit alpha

Chain A:

60%   36%

MET GLY CYS THR L5 R15 R35 I55 TYR HIS VAL ASN GLY TYR SER GLU GLU GLU CYS LYS GLN TYR LYS ALA VAL VAL TYR SER ASN THR ILE GLN SER ILE ILE ALA ILE ILE ARG ALA MET GLY ARG LEU LYS ILE ASP PHE GLY ASP SER ALA ARG ALA ALA ASP ASP ALA

ARG GLN LEU PHE VAL LEU ALA GLY ALA ALA GLU GLU GLY GLY PHE MET THR ALA GLU LEU ALA GLY VAL ILE LYS ARG LEU TRP LYS ASP SER GLY VAL GLN ALA CYS PHE ASN ARG SER ARG GLU GLU TYR GLN LEU ASN ASP SER ALA ALA TYR TYR LEU ASN ASP LEU ASP ARG ILE ALA GLN

PRO ASN TYR ILE PRO THR GLN GLN ASP VAL LEU ARG THR ARG VAL LYS T181 V201 R208 W211 F215 N216 D217 V218 L233 L237 N238 D239 N259 K260 K272 A283 D290 K310 D321 V361

• Molecule 2: Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1

Chain B:

90%   8%

MET GLY SER LEU LEU GLN SER E8 R13 Q14 R51 L56 K62 D71 S72 R73 S79 Q80 D81 T92 V95 H96 R101 Y110 V117 I128 L131 K132 T133 N137 E143 D168 T169 T201 R219 F239 S250 D251 D252

L290 L291 F297 V332 N345

• Molecule 3: Neuromedin-U-25

Chain C:

23%   12%   65%

PHE ARG VAL ASP GLU GLU PHE GLN SER PRO PHE ALA SER GLN SER ARG GLY Y18 P23 R24 N25 Q26

• Molecule 4: scFv16

Chain E:

87%   6%   7%

ASP V1 I50 T90 V96 F107 S119 SER GLY GLY GLY GLY SER GLY GLY GLY SER GLY GLY GLY GLY S136 V149 T150 C159 R160 L174 L188 I189 Y190 R191 M192 S193 F212 E222 Y235 L247 LYS

WORLDWIDE
wwPDB
PROTEIN DATA BANK

• Molecule 5: Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2

Chain G:

6%

77% 23%

ALA SER ASN ASN **T5 A6 S7** R12 N58 PRO PHE ARG GLU LYS LYS PHE PHE CYS ALA ILE LEU

• Molecule 6: Neuromedin-U receptor 2

Chain R:

5%

49% • 47%

MET LYS THR ILE ILE ALA LEU SER TYR ILE PHE CYS VAL PHE ASP TYR ASP ASP ASP ALA LYS LEU GLN THR MET HIS HIS HIS HIS HIS HIS HIS HIS ALA ASP LEU GLU ASP ASN TRP GLU THR LEU ASN ASP ASN LEU LYS VAL ILE GLU LYS ALA ASP

ASN ALA ALA GLN VAL LYS ASP ALA LEU THR LYS MET ARG ALA ALA ALA LEU ASP ALA GLN LYS ALA THR PRO PRO LYS LEU GLU ASP LYS SER PRO ASP SER PRO GLU MET LYS ASP PHE ARG HIS GLY PHE ASP ILE LEU VAL GLY GLN ILE ASP ASP ALA LEU LYS LEU ALA ASN GLU

GLY LYS VAL LYS LEU GLU ALA GLN ALA ALA GLU GLN LEU LYS THR THR ARG ASN ALA TYR ILE GLN LYS TYR LEU ALA SER GLU ASN LEU TYR PHE GLN GLY THR MET SER GLY MET GLU LYS LEU GLN ASN ALA SER TRP ILE TYR GLN GLN LYS LEU GLU GLU ASP PRO PHE GLN LYS

HIS LEU ASN SER THR GLU GLU TYR LEU ALA PHE LEU CYS GLY PRO ARG ARG **S42** E102 **R108** P111 F112 L113 F114 **L156** R161 **N181** I184 H185 **Y191** S196 LEU VAL PRO G200 K208 P209 M210 W211 L243 **K244 K245 D246 K247 S248 L249 E250 A251 D252**

E253 G254 N255 A256 N257 I258 Q259 R260 P261 C262 R263 K264 S265 V266 M269 L270 F271 V272 L273 C280 F290 V311 V314 S319 **S343 S344** F345 **H346 K347** GLN TRP HIS SER GLN HIS ASP PRO GLN LEU PRO PRO ALA GLN ARG ASN ILE PHE LEU THR GLU CYS HIS PHE

VAL GLU LEU THR GLU ASP ILE GLY PRO GLN PHE PRO CYS GLN SER SER MET HIS ASN SER HIS SER LEU PRO ALA ALA LEU SER SER GLU GLN GLN MET SER ARG THR ASN TYR GLN GLN SER PHE HIS PHE ASN LYS THR

4   Experimental information   ⓘ

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	2087642	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	61.8	Depositor
Minimum defocus (nm)	1100	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	1.705	Depositor
Minimum map value	-0.021	Depositor
Average map value	0.002	Depositor
Map value standard deviation	0.030	Depositor
Recommended contour level	0.06	Depositor
Map size (Å)	216.00002, 216.00002, 216.00002	wwPDB
Map dimensions	200, 200, 200	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.08, 1.08, 1.08	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	0.28	0/1942	0.43	0/2614
2	B	0.34	0/2647	0.51	0/3589
3	C	0.38	0/83	0.49	0/111
4	E	0.34	0/1820	0.51	1/2468 (0.0%)
5	G	0.26	0/411	0.39	0/555
6	R	0.32	0/2524	0.49	2/3436 (0.1%)
All	All	0.32	0/9427	0.48	3/12773 (0.0%)

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	R	113	LEU	N-CA-C	5.99	127.18	111.00
4	E	235	TYR	N-CA-C	5.68	126.35	111.00
6	R	114	PHE	N-CA-C	5.12	124.83	111.00

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	1908	1891	1905	7	0
2	B	2600	2508	2505	19	0
3	C	80	77	76	3	0
4	E	1776	1717	1716	9	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	G	407	420	419	0	0
6	R	2451	2499	2509	10	0
All	All	9222	9112	9130	44	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 2.

All (44) 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)
2:B:250:SER:OG	2:B:252:ASP:OD1	2.13	0.66
6:R:184:ILE:HG23	6:R:208:LYS:HB2	1.81	0.62
2:B:92:THR:HG22	2:B:92:THR:O	2.01	0.59
3:C:24:ARG:NH2	6:R:102:GLU:OE2	2.35	0.57
2:B:71:ASP:O	2:B:73:ARG:N	2.38	0.57
2:B:291:LEU:HD22	2:B:332:VAL:HG11	1.89	0.54
2:B:201:THR:O	2:B:201:THR:HG22	2.07	0.54
2:B:101:ARG:NH1	2:B:143:GLU:OE2	2.39	0.53
4:E:191:ARG:O	4:E:193:SER:N	2.42	0.53
6:R:208:LYS:HB3	6:R:209:PRO:HD2	1.91	0.51
4:E:188:LEU:C	4:E:189:ILE:HD12	2.31	0.51
3:C:25:ASN:OD1	6:R:181:ASN:ND2	2.41	0.51
1:A:208:ARG:NH1	1:A:239:ASP:OD1	2.39	0.48
6:R:280:CYS:HB3	6:R:319:SER:HB2	1.95	0.48
1:A:233:LEU:O	1:A:237:LEU:HD13	2.14	0.47
2:B:56:LEU:HD23	2:B:92:THR:HG23	1.96	0.47
4:E:174:LEU:HD22	4:E:212:PHE:CG	2.50	0.46
2:B:133:THR:OG1	2:B:137:ASN:O	2.26	0.46
1:A:201:VAL:HG21	1:A:211:TRP:CZ3	2.51	0.45
2:B:95:VAL:HG12	2:B:96:HIS:CE1	2.50	0.45
2:B:79:SER:OG	2:B:81:ASP:OD1	2.34	0.45
6:R:269:MET:O	6:R:273:LEU:HD13	2.16	0.45
2:B:168:ASP:O	2:B:169:THR:OG1	2.26	0.45
6:R:311:VAL:O	6:R:314:VAL:HG12	2.17	0.45
4:E:189:ILE:CG2	4:E:191:ARG:O	2.65	0.44
4:E:159:CYS:SG	4:E:160:ARG:N	2.90	0.43
1:A:215:PHE:O	1:A:218:VAL:HG22	2.18	0.43
2:B:297:PHE:CD1	2:B:297:PHE:N	2.86	0.43
4:E:90:THR:O	4:E:90:THR:HG23	2.19	0.43
2:B:128:ILE:HD12	2:B:128:ILE:N	2.35	0.42
2:B:117:VAL:HG22	2:B:131:LEU:HD21	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:117:VAL:HG13	2:B:131:LEU:HD11	2.02	0.42
2:B:290:LEU:C	2:B:290:LEU:HD23	2.40	0.42
4:E:149:VAL:HG22	4:E:150:THR:N	2.34	0.42
6:R:243:LEU:CD1	6:R:266:VAL:HG11	2.50	0.42
4:E:50:ILE:O	4:E:50:ILE:HG23	2.21	0.41
1:A:15:ARG:NH1	2:B:95:VAL:O	2.52	0.41
1:A:259:ASN:OD1	1:A:260:LYS:N	2.44	0.41
3:C:23:PRO:O	3:C:24:ARG:C	2.59	0.41
4:E:96:VAL:HG11	4:E:107:PHE:CD2	2.56	0.41
1:A:216:ASN:OD1	2:B:62:LYS:NZ	2.50	0.40
6:R:111:PRO:O	6:R:112:PHE:C	2.59	0.40
2:B:56:LEU:CD2	2:B:92:THR:HG23	2.51	0.40
6:R:246:ASP:OD1	6:R:247:LYS:N	2.54	0.40

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	228/361 (63%)	228 (100%)	0	0	100	100
2	B	336/345 (97%)	324 (96%)	12 (4%)	0	100	100
3	C	7/26 (27%)	6 (86%)	1 (14%)	0	100	100
4	E	227/248 (92%)	223 (98%)	4 (2%)	0	100	100
5	G	52/70 (74%)	52 (100%)	0	0	100	100
6	R	299/571 (52%)	292 (98%)	7 (2%)	0	100	100
All	All	1149/1621 (71%)	1125 (98%)	24 (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	210/316 (66%)	208 (99%)	2 (1%)	73	91
2	B	281/287 (98%)	279 (99%)	2 (1%)	81	94
3	C	8/24 (33%)	8 (100%)	0	100	100
4	E	195/201 (97%)	194 (100%)	1 (0%)	86	95
5	G	43/57 (75%)	43 (100%)	0	100	100
6	R	273/507 (54%)	266 (97%)	7 (3%)	41	75
All	All	1010/1392 (73%)	998 (99%)	12 (1%)	66	89

All (12) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	35	ARG
1	A	310	LYS
2	B	110	TYR
2	B	239	PHE
4	E	235	TYR
6	R	156	LEU
6	R	184	ILE
6	R	185	HIS
6	R	191	TYR
6	R	211	TRP
6	R	271	PHE
6	R	290	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	245	ASN
4	E	34	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-32314. 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 |
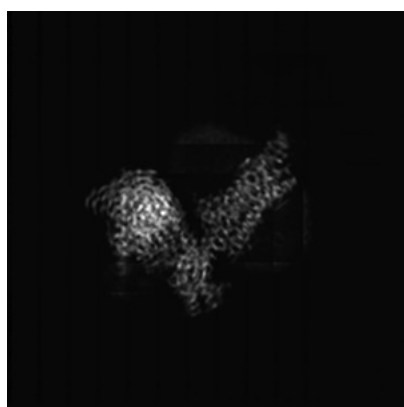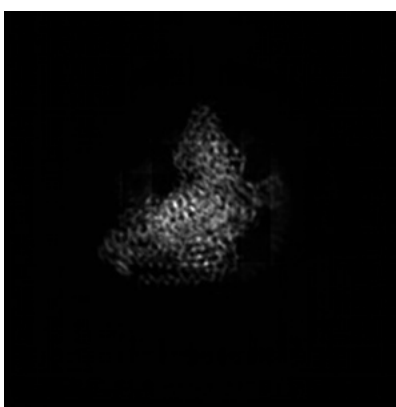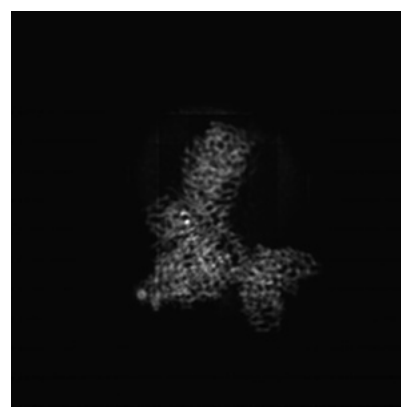
The images above show the map projected in three orthogonal directions.

6.2 Central slices ⓘ

6.2.1 Primary map
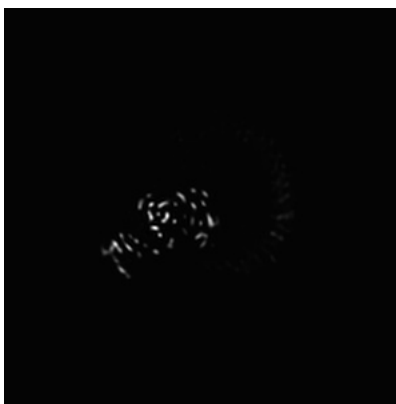
| X Index: 100 | Y Index: 100 | Z Index: 100 |

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: 96 | Y Index: 71 | Z Index: 106 |

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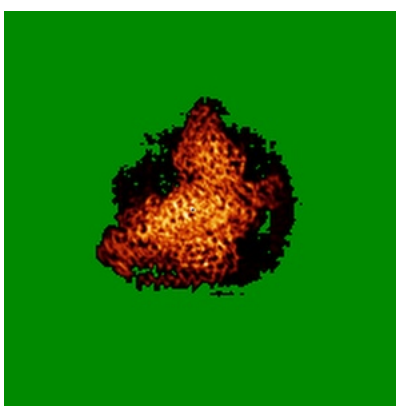
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

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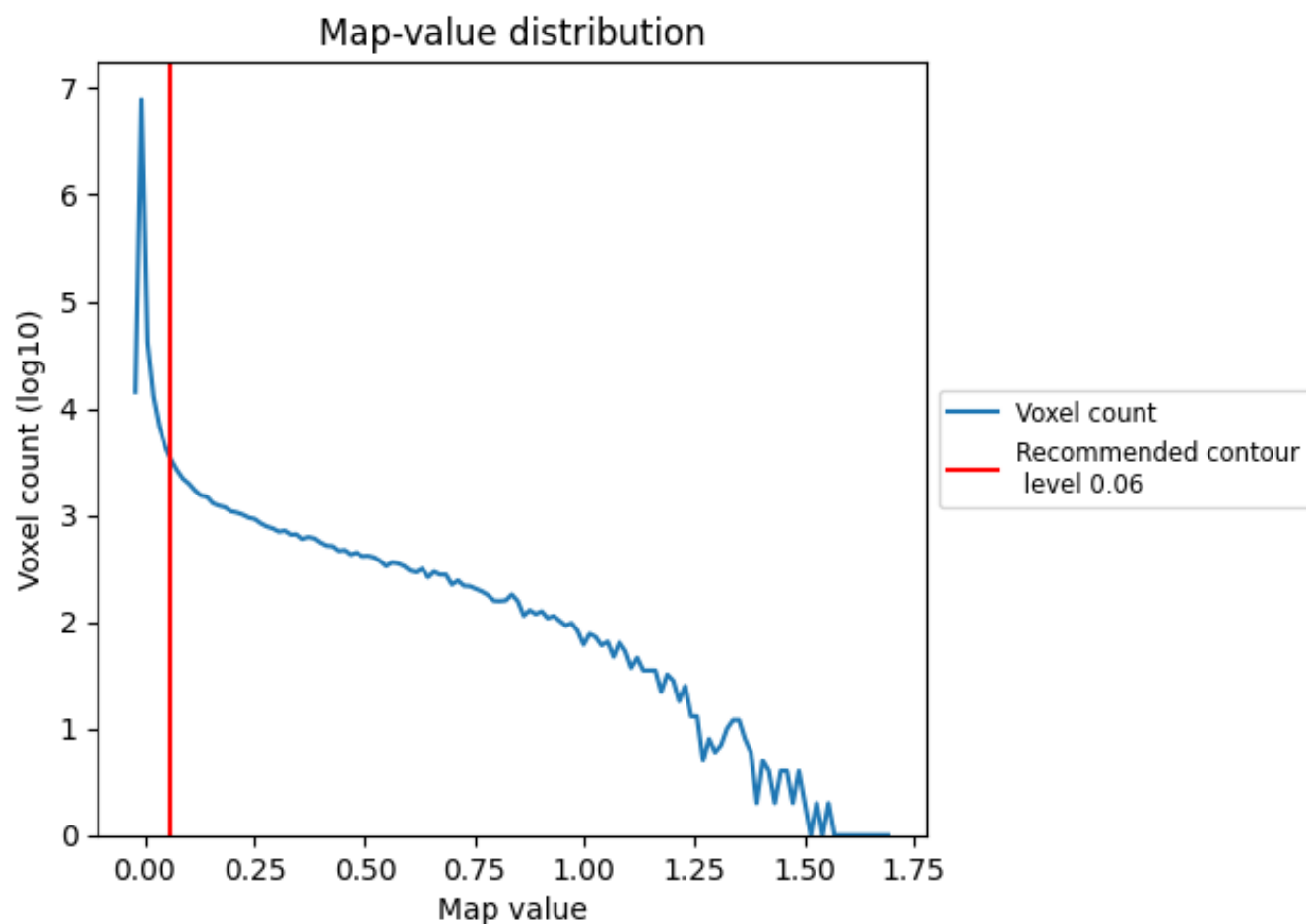
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate ⓘ
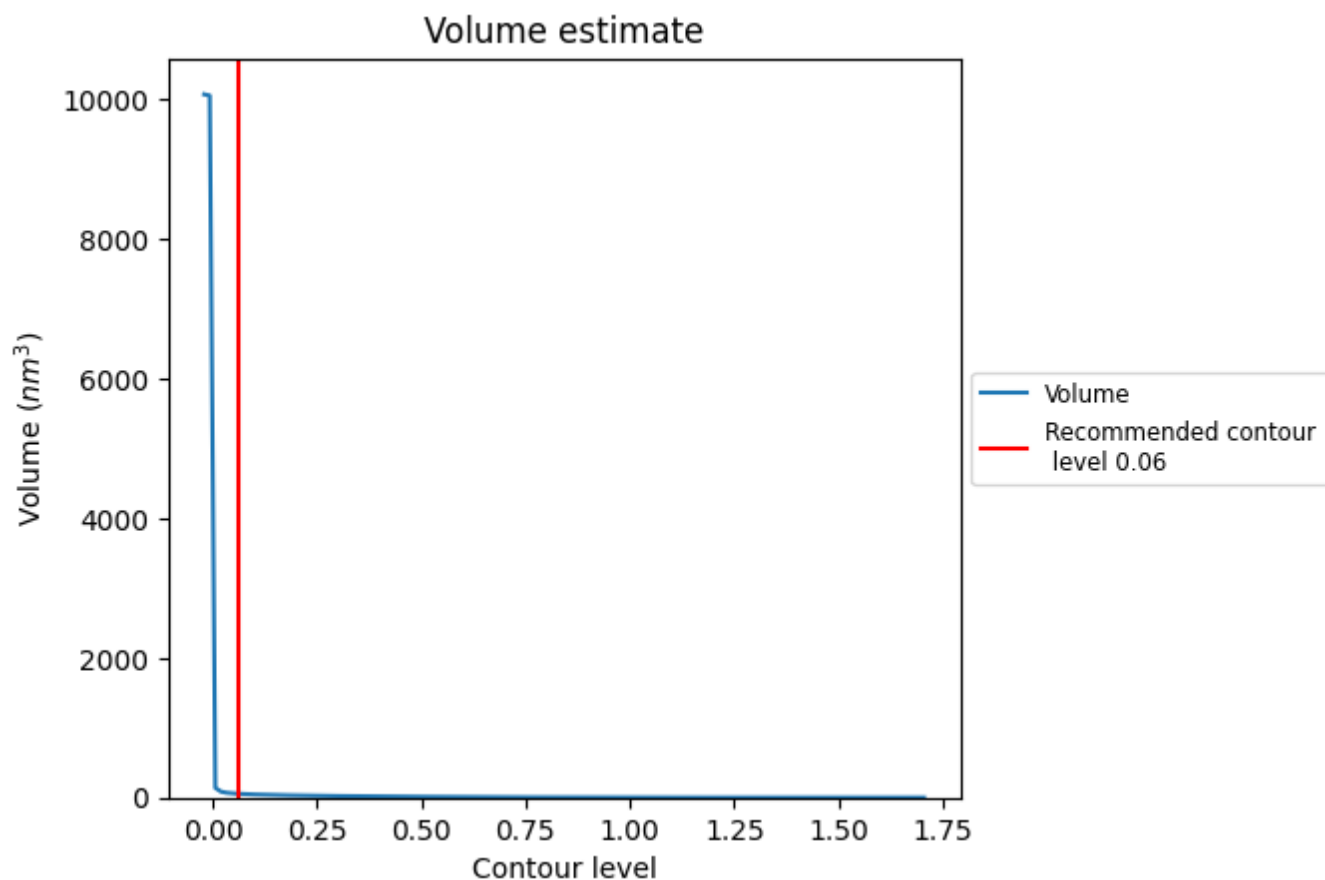
The volume at the recommended contour level is 54 nm^3; this corresponds to an approximate mass of 49 kDa.

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 ⓘ
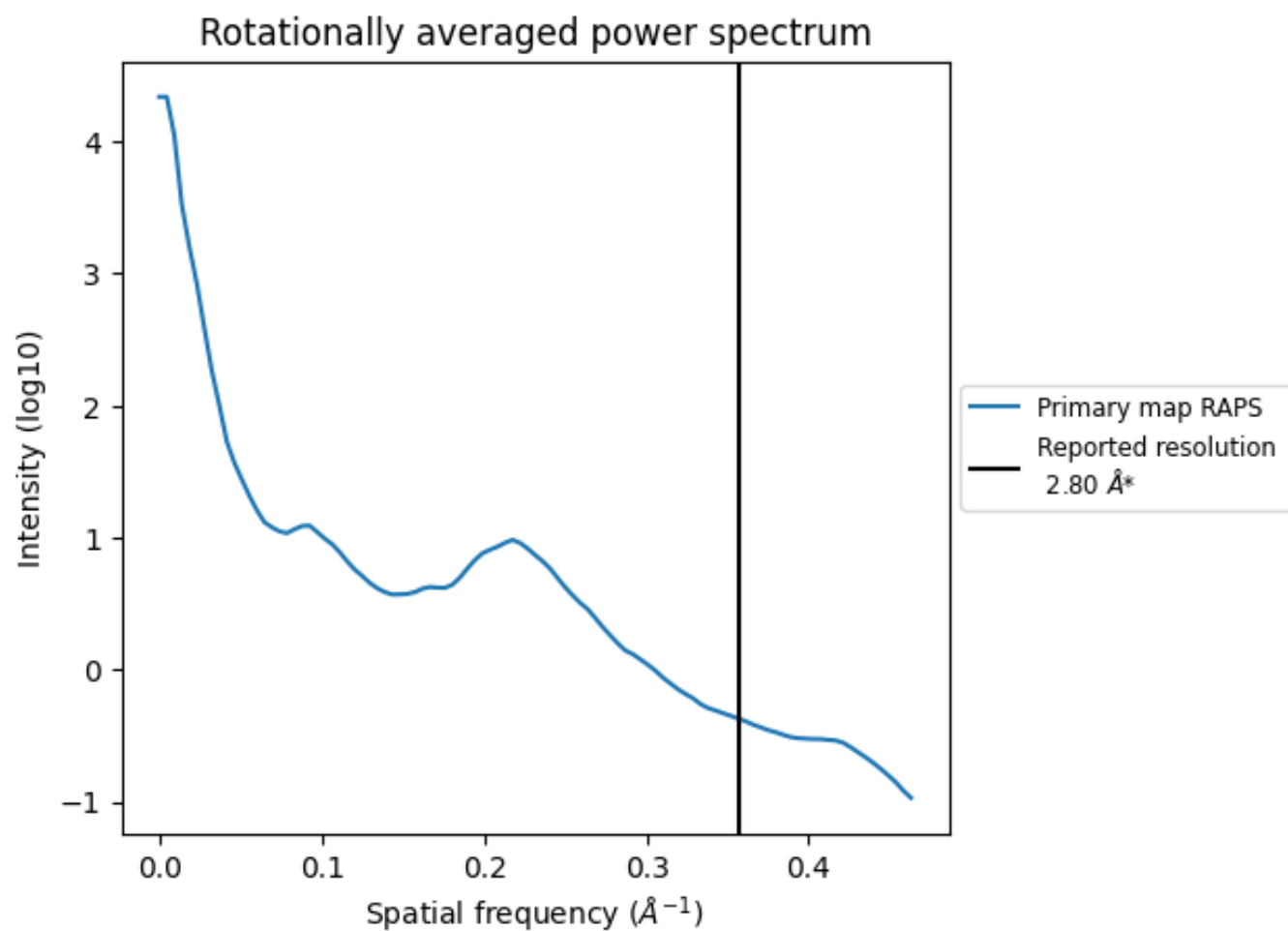
*Reported resolution corresponds to spatial frequency of 0.357 Å^{-1}

8 Fourier-Shell correlation (i)

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-32314 and PDB model 7W55. Per-residue inclusion information can be found in section 3 on page 5.

9.1 Map-model overlay ⓘ
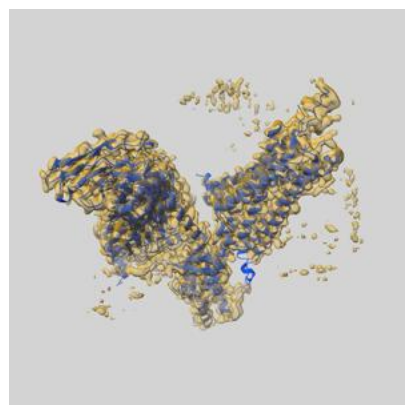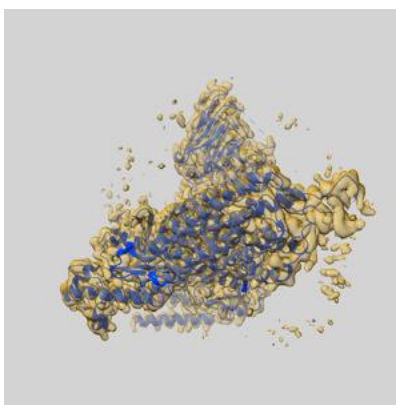
| X | Y | Z |
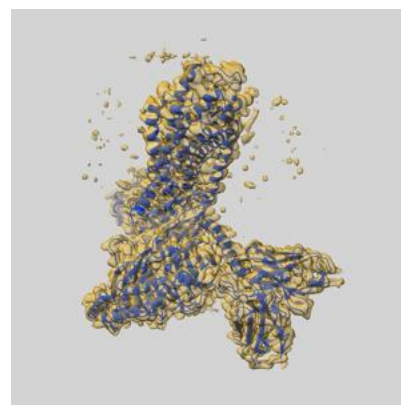
The images above show the 3D surface view of the map at the recommended contour level 0.06 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model ⓘ

X   Y   Z
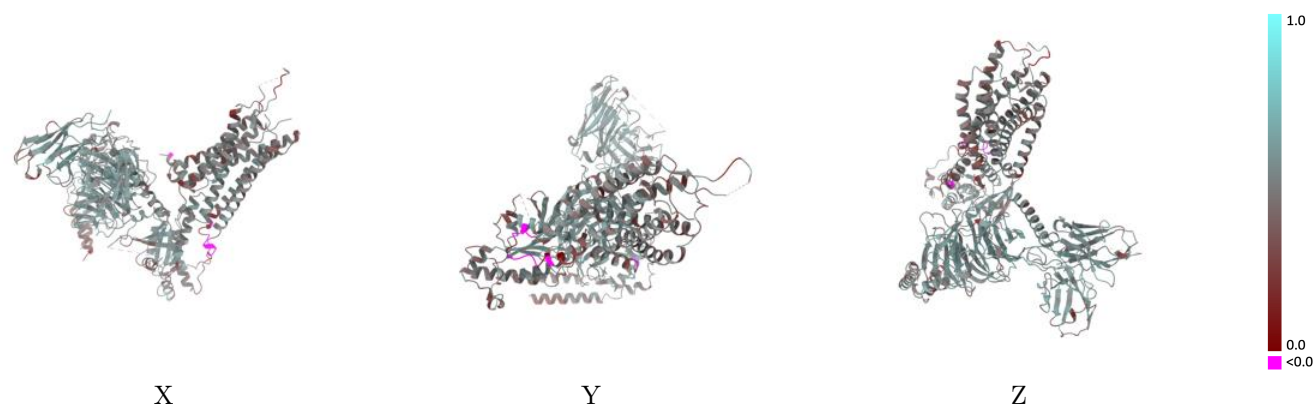
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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
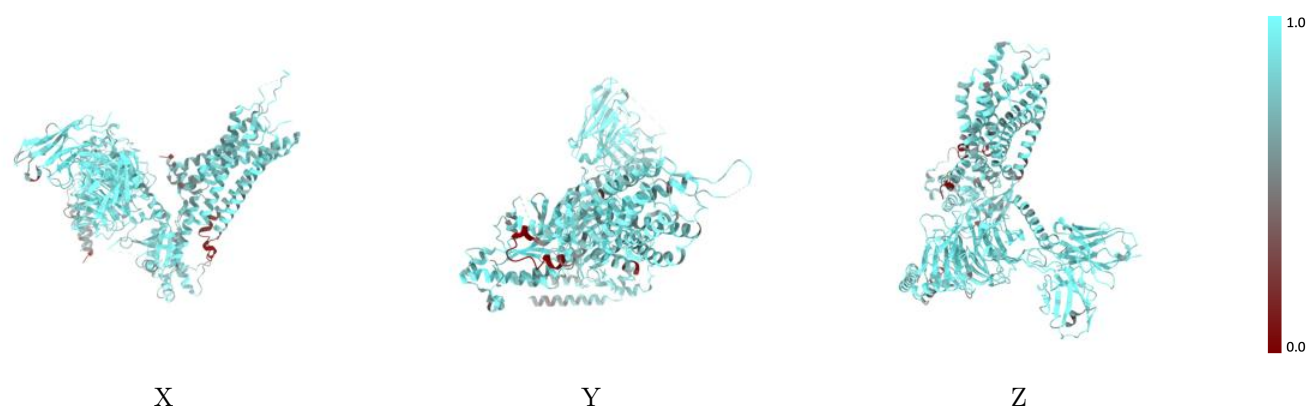
The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.06).

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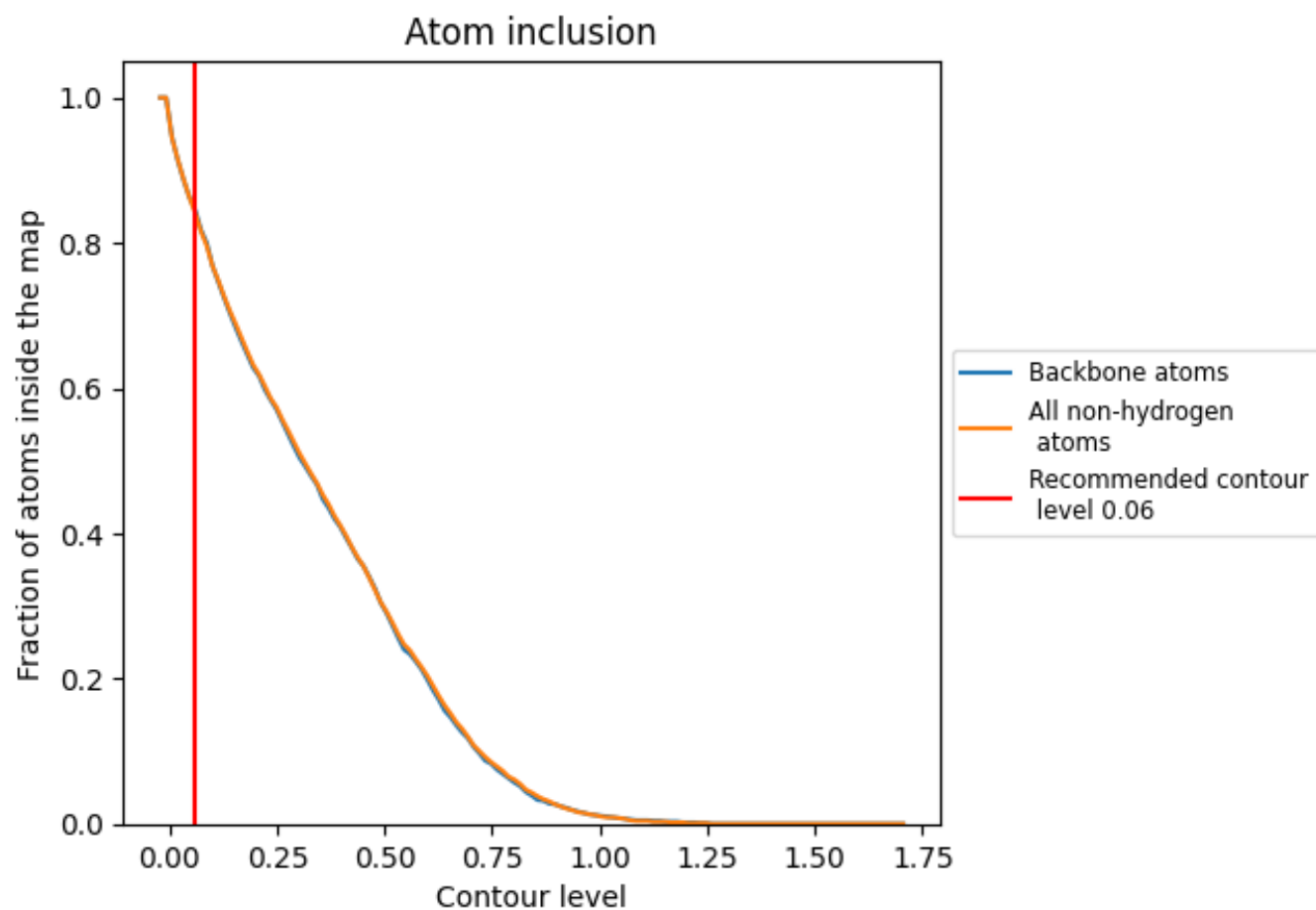
At the recommended contour level, 84% of all backbone atoms, 84% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.06) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8410	0.4890
A	0.8410	0.4880
B	0.8960	0.5300
C	0.9330	0.4960
E	0.8960	0.5320
G	0.7360	0.4440
R	0.7650	0.4210

1.0

0.0

<0.0