Full wwPDB EM Validation Report ⓘ

Nov 12, 2022 – 06:38 PM EST

PDB ID	:	6VAM
EMDB ID	:	EMD-21143
Title	:	Cryo-EM structure of octameric chicken CALHM1
Authors	:	Syrjanen, J.L.; Chou, T.H.; Furukawa, H.
Deposited on	:	2019-12-17
Resolution	:	3.63 Å(reported)

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

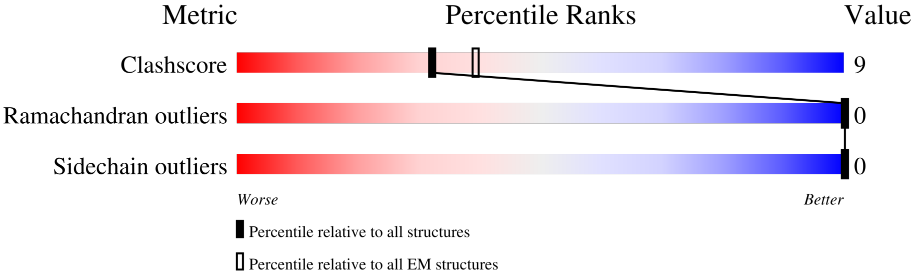
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance

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

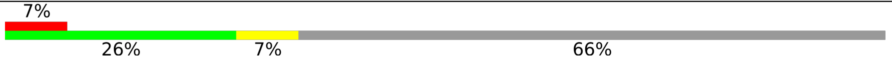
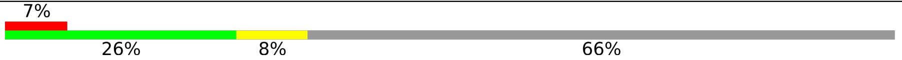
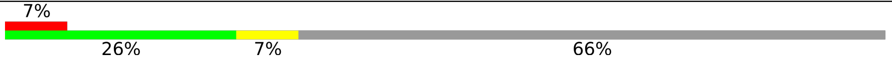
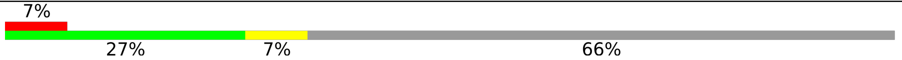
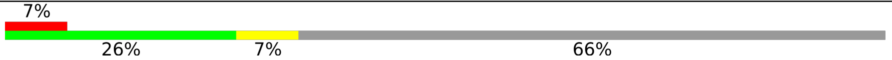
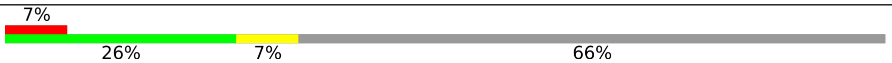
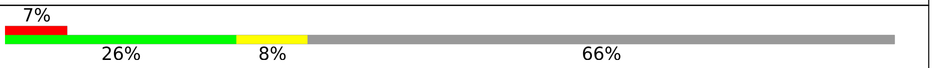
The reported resolution of this entry is 3.63 Å.

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)
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	638	
1	B	638	
1	C	638	
1	D	638	
1	E	638	
1	F	638	
1	G	638	
1	H	638	

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 13360 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 Green fluorescent protein,CALHM1 chimera.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	214	1670	1088	281	282	19	0	0
1	B	214	1670	1088	281	282	19	0	0
1	C	214	1670	1088	281	282	19	0	0
1	D	214	1670	1088	281	282	19	0	0
1	E	214	1670	1088	281	282	19	0	0
1	F	214	1670	1088	281	282	19	0	0
1	G	214	1670	1088	281	282	19	0	0
1	H	214	1670	1088	281	282	19	0	0

There are 616 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-295	MET	-	expression tag	UNP P42212
A	-294	TRP	-	expression tag	UNP P42212
A	-293	SER	-	expression tag	UNP P42212
A	-292	HIS	-	expression tag	UNP P42212
A	-291	PRO	-	expression tag	UNP P42212
A	-290	GLN	-	expression tag	UNP P42212
A	-289	PHE	-	expression tag	UNP P42212
A	-288	GLU	-	expression tag	UNP P42212
A	-287	LYS	-	expression tag	UNP P42212
A	-286	GLY	-	expression tag	UNP P42212
A	-285	GLY	-	expression tag	UNP P42212
A	-284	GLY	-	expression tag	UNP P42212
A	-283	SER	-	expression tag	UNP P42212
A	-282	GLY	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-281	GLY	-	expression tag	UNP P42212
A	-280	GLY	-	expression tag	UNP P42212
A	-279	SER	-	expression tag	UNP P42212
A	-278	GLY	-	expression tag	UNP P42212
A	-277	GLY	-	expression tag	UNP P42212
A	-276	SER	-	expression tag	UNP P42212
A	-275	ALA	-	expression tag	UNP P42212
A	-274	TRP	-	expression tag	UNP P42212
A	-273	SER	-	expression tag	UNP P42212
A	-272	HIS	-	expression tag	UNP P42212
A	-271	PRO	-	expression tag	UNP P42212
A	-270	GLN	-	expression tag	UNP P42212
A	-269	PHE	-	expression tag	UNP P42212
A	-268	GLU	-	expression tag	UNP P42212
A	-267	LYS	-	expression tag	UNP P42212
A	-266	GLY	-	expression tag	UNP P42212
A	-265	ALA	-	expression tag	UNP P42212
A	-264	HIS	-	expression tag	UNP P42212
A	-263	HIS	-	expression tag	UNP P42212
A	-262	HIS	-	expression tag	UNP P42212
A	-261	HIS	-	expression tag	UNP P42212
A	-260	HIS	-	expression tag	UNP P42212
A	-259	HIS	-	expression tag	UNP P42212
A	-258	HIS	-	expression tag	UNP P42212
A	-257	HIS	-	expression tag	UNP P42212
A	-256	ALA	-	expression tag	UNP P42212
A	-255	ALA	-	expression tag	UNP P42212
A	-254	ALA	-	expression tag	UNP P42212
A	-253	MET	-	expression tag	UNP P42212
A	-252	VAL	-	expression tag	UNP P42212
A	-189	LEU	PHE	conflict	UNP P42212
A	-188	THR	SER	conflict	UNP P42212
A	-47	LYS	ALA	conflict	UNP P42212
A	-22	LEU	HIS	conflict	UNP P42212
A	-14	SER	-	linker	UNP P42212
A	-13	GLY	-	linker	UNP P42212
A	-12	LEU	-	linker	UNP P42212
A	-11	ARG	-	linker	UNP P42212
A	-10	SER	-	linker	UNP P42212
A	-9	GLY	-	linker	UNP P42212
A	-8	LEU	-	linker	UNP P42212
A	-7	GLU	-	linker	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-6	VAL	-	linker	UNP P42212
A	-5	LEU	-	linker	UNP P42212
A	-4	PHE	-	linker	UNP P42212
A	-3	GLN	-	linker	UNP P42212
A	-2	GLY	-	linker	UNP P42212
A	-1	PRO	-	linker	UNP P42212
A	0	GLU	-	linker	UNP P42212
A	1	PHE	-	linker	UNP P42212
A	315	ALA	-	insertion	UNP A0A1D5NWS1
A	316	GLY	-	insertion	UNP A0A1D5NWS1
A	317	GLU	-	insertion	UNP A0A1D5NWS1
A	318	TRP	-	insertion	UNP A0A1D5NWS1
A	319	GLN	-	insertion	UNP A0A1D5NWS1
A	320	PRO	-	insertion	UNP A0A1D5NWS1
A	321	HIS	-	insertion	UNP A0A1D5NWS1
A	322	THR	-	insertion	UNP A0A1D5NWS1
A	323	GLN	-	insertion	UNP A0A1D5NWS1
A	324	PRO	-	insertion	UNP A0A1D5NWS1
A	325	HIS	-	insertion	UNP A0A1D5NWS1
A	326	THR	-	insertion	UNP A0A1D5NWS1
A	327	GLN	-	insertion	UNP A0A1D5NWS1
B	-295	MET	-	expression tag	UNP P42212
B	-294	TRP	-	expression tag	UNP P42212
B	-293	SER	-	expression tag	UNP P42212
B	-292	HIS	-	expression tag	UNP P42212
B	-291	PRO	-	expression tag	UNP P42212
B	-290	GLN	-	expression tag	UNP P42212
B	-289	PHE	-	expression tag	UNP P42212
B	-288	GLU	-	expression tag	UNP P42212
B	-287	LYS	-	expression tag	UNP P42212
B	-286	GLY	-	expression tag	UNP P42212
B	-285	GLY	-	expression tag	UNP P42212
B	-284	GLY	-	expression tag	UNP P42212
B	-283	SER	-	expression tag	UNP P42212
B	-282	GLY	-	expression tag	UNP P42212
B	-281	GLY	-	expression tag	UNP P42212
B	-280	GLY	-	expression tag	UNP P42212
B	-279	SER	-	expression tag	UNP P42212
B	-278	GLY	-	expression tag	UNP P42212
B	-277	GLY	-	expression tag	UNP P42212
B	-276	SER	-	expression tag	UNP P42212
B	-275	ALA	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-274	TRP	-	expression tag	UNP P42212
B	-273	SER	-	expression tag	UNP P42212
B	-272	HIS	-	expression tag	UNP P42212
B	-271	PRO	-	expression tag	UNP P42212
B	-270	GLN	-	expression tag	UNP P42212
B	-269	PHE	-	expression tag	UNP P42212
B	-268	GLU	-	expression tag	UNP P42212
B	-267	LYS	-	expression tag	UNP P42212
B	-266	GLY	-	expression tag	UNP P42212
B	-265	ALA	-	expression tag	UNP P42212
B	-264	HIS	-	expression tag	UNP P42212
B	-263	HIS	-	expression tag	UNP P42212
B	-262	HIS	-	expression tag	UNP P42212
B	-261	HIS	-	expression tag	UNP P42212
B	-260	HIS	-	expression tag	UNP P42212
B	-259	HIS	-	expression tag	UNP P42212
B	-258	HIS	-	expression tag	UNP P42212
B	-257	HIS	-	expression tag	UNP P42212
B	-256	ALA	-	expression tag	UNP P42212
B	-255	ALA	-	expression tag	UNP P42212
B	-254	ALA	-	expression tag	UNP P42212
B	-253	MET	-	expression tag	UNP P42212
B	-252	VAL	-	expression tag	UNP P42212
B	-189	LEU	PHE	conflict	UNP P42212
B	-188	THR	SER	conflict	UNP P42212
B	-47	LYS	ALA	conflict	UNP P42212
B	-22	LEU	HIS	conflict	UNP P42212
B	-14	SER	-	linker	UNP P42212
B	-13	GLY	-	linker	UNP P42212
B	-12	LEU	-	linker	UNP P42212
B	-11	ARG	-	linker	UNP P42212
B	-10	SER	-	linker	UNP P42212
B	-9	GLY	-	linker	UNP P42212
B	-8	LEU	-	linker	UNP P42212
B	-7	GLU	-	linker	UNP P42212
B	-6	VAL	-	linker	UNP P42212
B	-5	LEU	-	linker	UNP P42212
B	-4	PHE	-	linker	UNP P42212
B	-3	GLN	-	linker	UNP P42212
B	-2	GLY	-	linker	UNP P42212
B	-1	PRO	-	linker	UNP P42212
B	0	GLU	-	linker	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1	PHE	-	linker	UNP P42212
B	315	ALA	-	insertion	UNP A0A1D5NWS1
B	316	GLY	-	insertion	UNP A0A1D5NWS1
B	317	GLU	-	insertion	UNP A0A1D5NWS1
B	318	TRP	-	insertion	UNP A0A1D5NWS1
B	319	GLN	-	insertion	UNP A0A1D5NWS1
B	320	PRO	-	insertion	UNP A0A1D5NWS1
B	321	HIS	-	insertion	UNP A0A1D5NWS1
B	322	THR	-	insertion	UNP A0A1D5NWS1
B	323	GLN	-	insertion	UNP A0A1D5NWS1
B	324	PRO	-	insertion	UNP A0A1D5NWS1
B	325	HIS	-	insertion	UNP A0A1D5NWS1
B	326	THR	-	insertion	UNP A0A1D5NWS1
B	327	GLN	-	insertion	UNP A0A1D5NWS1
C	-295	MET	-	expression tag	UNP P42212
C	-294	TRP	-	expression tag	UNP P42212
C	-293	SER	-	expression tag	UNP P42212
C	-292	HIS	-	expression tag	UNP P42212
C	-291	PRO	-	expression tag	UNP P42212
C	-290	GLN	-	expression tag	UNP P42212
C	-289	PHE	-	expression tag	UNP P42212
C	-288	GLU	-	expression tag	UNP P42212
C	-287	LYS	-	expression tag	UNP P42212
C	-286	GLY	-	expression tag	UNP P42212
C	-285	GLY	-	expression tag	UNP P42212
C	-284	GLY	-	expression tag	UNP P42212
C	-283	SER	-	expression tag	UNP P42212
C	-282	GLY	-	expression tag	UNP P42212
C	-281	GLY	-	expression tag	UNP P42212
C	-280	GLY	-	expression tag	UNP P42212
C	-279	SER	-	expression tag	UNP P42212
C	-278	GLY	-	expression tag	UNP P42212
C	-277	GLY	-	expression tag	UNP P42212
C	-276	SER	-	expression tag	UNP P42212
C	-275	ALA	-	expression tag	UNP P42212
C	-274	TRP	-	expression tag	UNP P42212
C	-273	SER	-	expression tag	UNP P42212
C	-272	HIS	-	expression tag	UNP P42212
C	-271	PRO	-	expression tag	UNP P42212
C	-270	GLN	-	expression tag	UNP P42212
C	-269	PHE	-	expression tag	UNP P42212
C	-268	GLU	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
C	-267	LYS	-	expression tag	UNP P42212
C	-266	GLY	-	expression tag	UNP P42212
C	-265	ALA	-	expression tag	UNP P42212
C	-264	HIS	-	expression tag	UNP P42212
C	-263	HIS	-	expression tag	UNP P42212
C	-262	HIS	-	expression tag	UNP P42212
C	-261	HIS	-	expression tag	UNP P42212
C	-260	HIS	-	expression tag	UNP P42212
C	-259	HIS	-	expression tag	UNP P42212
C	-258	HIS	-	expression tag	UNP P42212
C	-257	HIS	-	expression tag	UNP P42212
C	-256	ALA	-	expression tag	UNP P42212
C	-255	ALA	-	expression tag	UNP P42212
C	-254	ALA	-	expression tag	UNP P42212
C	-253	MET	-	expression tag	UNP P42212
C	-252	VAL	-	expression tag	UNP P42212
C	-189	LEU	PHE	conflict	UNP P42212
C	-188	THR	SER	conflict	UNP P42212
C	-47	LYS	ALA	conflict	UNP P42212
C	-22	LEU	HIS	conflict	UNP P42212
C	-14	SER	-	linker	UNP P42212
C	-13	GLY	-	linker	UNP P42212
C	-12	LEU	-	linker	UNP P42212
C	-11	ARG	-	linker	UNP P42212
C	-10	SER	-	linker	UNP P42212
C	-9	GLY	-	linker	UNP P42212
C	-8	LEU	-	linker	UNP P42212
C	-7	GLU	-	linker	UNP P42212
C	-6	VAL	-	linker	UNP P42212
C	-5	LEU	-	linker	UNP P42212
C	-4	PHE	-	linker	UNP P42212
C	-3	GLN	-	linker	UNP P42212
C	-2	GLY	-	linker	UNP P42212
C	-1	PRO	-	linker	UNP P42212
C	0	GLU	-	linker	UNP P42212
C	1	PHE	-	linker	UNP P42212
C	315	ALA	-	insertion	UNP A0A1D5NWS1
C	316	GLY	-	insertion	UNP A0A1D5NWS1
C	317	GLU	-	insertion	UNP A0A1D5NWS1
C	318	TRP	-	insertion	UNP A0A1D5NWS1
C	319	GLN	-	insertion	UNP A0A1D5NWS1
C	320	PRO	-	insertion	UNP A0A1D5NWS1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	321	HIS	-	insertion	UNP A0A1D5NWS1
C	322	THR	-	insertion	UNP A0A1D5NWS1
C	323	GLN	-	insertion	UNP A0A1D5NWS1
C	324	PRO	-	insertion	UNP A0A1D5NWS1
C	325	HIS	-	insertion	UNP A0A1D5NWS1
C	326	THR	-	insertion	UNP A0A1D5NWS1
C	327	GLN	-	insertion	UNP A0A1D5NWS1
D	-295	MET	-	expression tag	UNP P42212
D	-294	TRP	-	expression tag	UNP P42212
D	-293	SER	-	expression tag	UNP P42212
D	-292	HIS	-	expression tag	UNP P42212
D	-291	PRO	-	expression tag	UNP P42212
D	-290	GLN	-	expression tag	UNP P42212
D	-289	PHE	-	expression tag	UNP P42212
D	-288	GLU	-	expression tag	UNP P42212
D	-287	LYS	-	expression tag	UNP P42212
D	-286	GLY	-	expression tag	UNP P42212
D	-285	GLY	-	expression tag	UNP P42212
D	-284	GLY	-	expression tag	UNP P42212
D	-283	SER	-	expression tag	UNP P42212
D	-282	GLY	-	expression tag	UNP P42212
D	-281	GLY	-	expression tag	UNP P42212
D	-280	GLY	-	expression tag	UNP P42212
D	-279	SER	-	expression tag	UNP P42212
D	-278	GLY	-	expression tag	UNP P42212
D	-277	GLY	-	expression tag	UNP P42212
D	-276	SER	-	expression tag	UNP P42212
D	-275	ALA	-	expression tag	UNP P42212
D	-274	TRP	-	expression tag	UNP P42212
D	-273	SER	-	expression tag	UNP P42212
D	-272	HIS	-	expression tag	UNP P42212
D	-271	PRO	-	expression tag	UNP P42212
D	-270	GLN	-	expression tag	UNP P42212
D	-269	PHE	-	expression tag	UNP P42212
D	-268	GLU	-	expression tag	UNP P42212
D	-267	LYS	-	expression tag	UNP P42212
D	-266	GLY	-	expression tag	UNP P42212
D	-265	ALA	-	expression tag	UNP P42212
D	-264	HIS	-	expression tag	UNP P42212
D	-263	HIS	-	expression tag	UNP P42212
D	-262	HIS	-	expression tag	UNP P42212
D	-261	HIS	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
D	-260	HIS	-	expression tag	UNP P42212
D	-259	HIS	-	expression tag	UNP P42212
D	-258	HIS	-	expression tag	UNP P42212
D	-257	HIS	-	expression tag	UNP P42212
D	-256	ALA	-	expression tag	UNP P42212
D	-255	ALA	-	expression tag	UNP P42212
D	-254	ALA	-	expression tag	UNP P42212
D	-253	MET	-	expression tag	UNP P42212
D	-252	VAL	-	expression tag	UNP P42212
D	-189	LEU	PHE	conflict	UNP P42212
D	-188	THR	SER	conflict	UNP P42212
D	-47	LYS	ALA	conflict	UNP P42212
D	-22	LEU	HIS	conflict	UNP P42212
D	-14	SER	-	linker	UNP P42212
D	-13	GLY	-	linker	UNP P42212
D	-12	LEU	-	linker	UNP P42212
D	-11	ARG	-	linker	UNP P42212
D	-10	SER	-	linker	UNP P42212
D	-9	GLY	-	linker	UNP P42212
D	-8	LEU	-	linker	UNP P42212
D	-7	GLU	-	linker	UNP P42212
D	-6	VAL	-	linker	UNP P42212
D	-5	LEU	-	linker	UNP P42212
D	-4	PHE	-	linker	UNP P42212
D	-3	GLN	-	linker	UNP P42212
D	-2	GLY	-	linker	UNP P42212
D	-1	PRO	-	linker	UNP P42212
D	0	GLU	-	linker	UNP P42212
D	1	PHE	-	linker	UNP P42212
D	315	ALA	-	insertion	UNP A0A1D5NWS1
D	316	GLY	-	insertion	UNP A0A1D5NWS1
D	317	GLU	-	insertion	UNP A0A1D5NWS1
D	318	TRP	-	insertion	UNP A0A1D5NWS1
D	319	GLN	-	insertion	UNP A0A1D5NWS1
D	320	PRO	-	insertion	UNP A0A1D5NWS1
D	321	HIS	-	insertion	UNP A0A1D5NWS1
D	322	THR	-	insertion	UNP A0A1D5NWS1
D	323	GLN	-	insertion	UNP A0A1D5NWS1
D	324	PRO	-	insertion	UNP A0A1D5NWS1
D	325	HIS	-	insertion	UNP A0A1D5NWS1
D	326	THR	-	insertion	UNP A0A1D5NWS1
D	327	GLN	-	insertion	UNP A0A1D5NWS1

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Chain	Residue	Modelled	Actual	Comment	Reference
E	-295	MET	-	expression tag	UNP P42212
E	-294	TRP	-	expression tag	UNP P42212
E	-293	SER	-	expression tag	UNP P42212
E	-292	HIS	-	expression tag	UNP P42212
E	-291	PRO	-	expression tag	UNP P42212
E	-290	GLN	-	expression tag	UNP P42212
E	-289	PHE	-	expression tag	UNP P42212
E	-288	GLU	-	expression tag	UNP P42212
E	-287	LYS	-	expression tag	UNP P42212
E	-286	GLY	-	expression tag	UNP P42212
E	-285	GLY	-	expression tag	UNP P42212
E	-284	GLY	-	expression tag	UNP P42212
E	-283	SER	-	expression tag	UNP P42212
E	-282	GLY	-	expression tag	UNP P42212
E	-281	GLY	-	expression tag	UNP P42212
E	-280	GLY	-	expression tag	UNP P42212
E	-279	SER	-	expression tag	UNP P42212
E	-278	GLY	-	expression tag	UNP P42212
E	-277	GLY	-	expression tag	UNP P42212
E	-276	SER	-	expression tag	UNP P42212
E	-275	ALA	-	expression tag	UNP P42212
E	-274	TRP	-	expression tag	UNP P42212
E	-273	SER	-	expression tag	UNP P42212
E	-272	HIS	-	expression tag	UNP P42212
E	-271	PRO	-	expression tag	UNP P42212
E	-270	GLN	-	expression tag	UNP P42212
E	-269	PHE	-	expression tag	UNP P42212
E	-268	GLU	-	expression tag	UNP P42212
E	-267	LYS	-	expression tag	UNP P42212
E	-266	GLY	-	expression tag	UNP P42212
E	-265	ALA	-	expression tag	UNP P42212
E	-264	HIS	-	expression tag	UNP P42212
E	-263	HIS	-	expression tag	UNP P42212
E	-262	HIS	-	expression tag	UNP P42212
E	-261	HIS	-	expression tag	UNP P42212
E	-260	HIS	-	expression tag	UNP P42212
E	-259	HIS	-	expression tag	UNP P42212
E	-258	HIS	-	expression tag	UNP P42212
E	-257	HIS	-	expression tag	UNP P42212
E	-256	ALA	-	expression tag	UNP P42212
E	-255	ALA	-	expression tag	UNP P42212
E	-254	ALA	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
E	-253	MET	-	expression tag	UNP P42212
E	-252	VAL	-	expression tag	UNP P42212
E	-189	LEU	PHE	conflict	UNP P42212
E	-188	THR	SER	conflict	UNP P42212
E	-47	LYS	ALA	conflict	UNP P42212
E	-22	LEU	HIS	conflict	UNP P42212
E	-14	SER	-	linker	UNP P42212
E	-13	GLY	-	linker	UNP P42212
E	-12	LEU	-	linker	UNP P42212
E	-11	ARG	-	linker	UNP P42212
E	-10	SER	-	linker	UNP P42212
E	-9	GLY	-	linker	UNP P42212
E	-8	LEU	-	linker	UNP P42212
E	-7	GLU	-	linker	UNP P42212
E	-6	VAL	-	linker	UNP P42212
E	-5	LEU	-	linker	UNP P42212
E	-4	PHE	-	linker	UNP P42212
E	-3	GLN	-	linker	UNP P42212
E	-2	GLY	-	linker	UNP P42212
E	-1	PRO	-	linker	UNP P42212
E	0	GLU	-	linker	UNP P42212
E	1	PHE	-	linker	UNP P42212
E	315	ALA	-	insertion	UNP A0A1D5NWS1
E	316	GLY	-	insertion	UNP A0A1D5NWS1
E	317	GLU	-	insertion	UNP A0A1D5NWS1
E	318	TRP	-	insertion	UNP A0A1D5NWS1
E	319	GLN	-	insertion	UNP A0A1D5NWS1
E	320	PRO	-	insertion	UNP A0A1D5NWS1
E	321	HIS	-	insertion	UNP A0A1D5NWS1
E	322	THR	-	insertion	UNP A0A1D5NWS1
E	323	GLN	-	insertion	UNP A0A1D5NWS1
E	324	PRO	-	insertion	UNP A0A1D5NWS1
E	325	HIS	-	insertion	UNP A0A1D5NWS1
E	326	THR	-	insertion	UNP A0A1D5NWS1
E	327	GLN	-	insertion	UNP A0A1D5NWS1
F	-295	MET	-	expression tag	UNP P42212
F	-294	TRP	-	expression tag	UNP P42212
F	-293	SER	-	expression tag	UNP P42212
F	-292	HIS	-	expression tag	UNP P42212
F	-291	PRO	-	expression tag	UNP P42212
F	-290	GLN	-	expression tag	UNP P42212
F	-289	PHE	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
F	-288	GLU	-	expression tag	UNP P42212
F	-287	LYS	-	expression tag	UNP P42212
F	-286	GLY	-	expression tag	UNP P42212
F	-285	GLY	-	expression tag	UNP P42212
F	-284	GLY	-	expression tag	UNP P42212
F	-283	SER	-	expression tag	UNP P42212
F	-282	GLY	-	expression tag	UNP P42212
F	-281	GLY	-	expression tag	UNP P42212
F	-280	GLY	-	expression tag	UNP P42212
F	-279	SER	-	expression tag	UNP P42212
F	-278	GLY	-	expression tag	UNP P42212
F	-277	GLY	-	expression tag	UNP P42212
F	-276	SER	-	expression tag	UNP P42212
F	-275	ALA	-	expression tag	UNP P42212
F	-274	TRP	-	expression tag	UNP P42212
F	-273	SER	-	expression tag	UNP P42212
F	-272	HIS	-	expression tag	UNP P42212
F	-271	PRO	-	expression tag	UNP P42212
F	-270	GLN	-	expression tag	UNP P42212
F	-269	PHE	-	expression tag	UNP P42212
F	-268	GLU	-	expression tag	UNP P42212
F	-267	LYS	-	expression tag	UNP P42212
F	-266	GLY	-	expression tag	UNP P42212
F	-265	ALA	-	expression tag	UNP P42212
F	-264	HIS	-	expression tag	UNP P42212
F	-263	HIS	-	expression tag	UNP P42212
F	-262	HIS	-	expression tag	UNP P42212
F	-261	HIS	-	expression tag	UNP P42212
F	-260	HIS	-	expression tag	UNP P42212
F	-259	HIS	-	expression tag	UNP P42212
F	-258	HIS	-	expression tag	UNP P42212
F	-257	HIS	-	expression tag	UNP P42212
F	-256	ALA	-	expression tag	UNP P42212
F	-255	ALA	-	expression tag	UNP P42212
F	-254	ALA	-	expression tag	UNP P42212
F	-253	MET	-	expression tag	UNP P42212
F	-252	VAL	-	expression tag	UNP P42212
F	-189	LEU	PHE	conflict	UNP P42212
F	-188	THR	SER	conflict	UNP P42212
F	-47	LYS	ALA	conflict	UNP P42212
F	-22	LEU	HIS	conflict	UNP P42212
F	-14	SER	-	linker	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
F	-13	GLY	-	linker	UNP P42212
F	-12	LEU	-	linker	UNP P42212
F	-11	ARG	-	linker	UNP P42212
F	-10	SER	-	linker	UNP P42212
F	-9	GLY	-	linker	UNP P42212
F	-8	LEU	-	linker	UNP P42212
F	-7	GLU	-	linker	UNP P42212
F	-6	VAL	-	linker	UNP P42212
F	-5	LEU	-	linker	UNP P42212
F	-4	PHE	-	linker	UNP P42212
F	-3	GLN	-	linker	UNP P42212
F	-2	GLY	-	linker	UNP P42212
F	-1	PRO	-	linker	UNP P42212
F	0	GLU	-	linker	UNP P42212
F	1	PHE	-	linker	UNP P42212
F	315	ALA	-	insertion	UNP A0A1D5NWS1
F	316	GLY	-	insertion	UNP A0A1D5NWS1
F	317	GLU	-	insertion	UNP A0A1D5NWS1
F	318	TRP	-	insertion	UNP A0A1D5NWS1
F	319	GLN	-	insertion	UNP A0A1D5NWS1
F	320	PRO	-	insertion	UNP A0A1D5NWS1
F	321	HIS	-	insertion	UNP A0A1D5NWS1
F	322	THR	-	insertion	UNP A0A1D5NWS1
F	323	GLN	-	insertion	UNP A0A1D5NWS1
F	324	PRO	-	insertion	UNP A0A1D5NWS1
F	325	HIS	-	insertion	UNP A0A1D5NWS1
F	326	THR	-	insertion	UNP A0A1D5NWS1
F	327	GLN	-	insertion	UNP A0A1D5NWS1
G	-295	MET	-	expression tag	UNP P42212
G	-294	TRP	-	expression tag	UNP P42212
G	-293	SER	-	expression tag	UNP P42212
G	-292	HIS	-	expression tag	UNP P42212
G	-291	PRO	-	expression tag	UNP P42212
G	-290	GLN	-	expression tag	UNP P42212
G	-289	PHE	-	expression tag	UNP P42212
G	-288	GLU	-	expression tag	UNP P42212
G	-287	LYS	-	expression tag	UNP P42212
G	-286	GLY	-	expression tag	UNP P42212
G	-285	GLY	-	expression tag	UNP P42212
G	-284	GLY	-	expression tag	UNP P42212
G	-283	SER	-	expression tag	UNP P42212
G	-282	GLY	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
G	-281	GLY	-	expression tag	UNP P42212
G	-280	GLY	-	expression tag	UNP P42212
G	-279	SER	-	expression tag	UNP P42212
G	-278	GLY	-	expression tag	UNP P42212
G	-277	GLY	-	expression tag	UNP P42212
G	-276	SER	-	expression tag	UNP P42212
G	-275	ALA	-	expression tag	UNP P42212
G	-274	TRP	-	expression tag	UNP P42212
G	-273	SER	-	expression tag	UNP P42212
G	-272	HIS	-	expression tag	UNP P42212
G	-271	PRO	-	expression tag	UNP P42212
G	-270	GLN	-	expression tag	UNP P42212
G	-269	PHE	-	expression tag	UNP P42212
G	-268	GLU	-	expression tag	UNP P42212
G	-267	LYS	-	expression tag	UNP P42212
G	-266	GLY	-	expression tag	UNP P42212
G	-265	ALA	-	expression tag	UNP P42212
G	-264	HIS	-	expression tag	UNP P42212
G	-263	HIS	-	expression tag	UNP P42212
G	-262	HIS	-	expression tag	UNP P42212
G	-261	HIS	-	expression tag	UNP P42212
G	-260	HIS	-	expression tag	UNP P42212
G	-259	HIS	-	expression tag	UNP P42212
G	-258	HIS	-	expression tag	UNP P42212
G	-257	HIS	-	expression tag	UNP P42212
G	-256	ALA	-	expression tag	UNP P42212
G	-255	ALA	-	expression tag	UNP P42212
G	-254	ALA	-	expression tag	UNP P42212
G	-253	MET	-	expression tag	UNP P42212
G	-252	VAL	-	expression tag	UNP P42212
G	-189	LEU	PHE	conflict	UNP P42212
G	-188	THR	SER	conflict	UNP P42212
G	-47	LYS	ALA	conflict	UNP P42212
G	-22	LEU	HIS	conflict	UNP P42212
G	-14	SER	-	linker	UNP P42212
G	-13	GLY	-	linker	UNP P42212
G	-12	LEU	-	linker	UNP P42212
G	-11	ARG	-	linker	UNP P42212
G	-10	SER	-	linker	UNP P42212
G	-9	GLY	-	linker	UNP P42212
G	-8	LEU	-	linker	UNP P42212
G	-7	GLU	-	linker	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
G	-6	VAL	-	linker	UNP P42212
G	-5	LEU	-	linker	UNP P42212
G	-4	PHE	-	linker	UNP P42212
G	-3	GLN	-	linker	UNP P42212
G	-2	GLY	-	linker	UNP P42212
G	-1	PRO	-	linker	UNP P42212
G	0	GLU	-	linker	UNP P42212
G	1	PHE	-	linker	UNP P42212
G	315	ALA	-	insertion	UNP A0A1D5NWS1
G	316	GLY	-	insertion	UNP A0A1D5NWS1
G	317	GLU	-	insertion	UNP A0A1D5NWS1
G	318	TRP	-	insertion	UNP A0A1D5NWS1
G	319	GLN	-	insertion	UNP A0A1D5NWS1
G	320	PRO	-	insertion	UNP A0A1D5NWS1
G	321	HIS	-	insertion	UNP A0A1D5NWS1
G	322	THR	-	insertion	UNP A0A1D5NWS1
G	323	GLN	-	insertion	UNP A0A1D5NWS1
G	324	PRO	-	insertion	UNP A0A1D5NWS1
G	325	HIS	-	insertion	UNP A0A1D5NWS1
G	326	THR	-	insertion	UNP A0A1D5NWS1
G	327	GLN	-	insertion	UNP A0A1D5NWS1
H	-295	MET	-	expression tag	UNP P42212
H	-294	TRP	-	expression tag	UNP P42212
H	-293	SER	-	expression tag	UNP P42212
H	-292	HIS	-	expression tag	UNP P42212
H	-291	PRO	-	expression tag	UNP P42212
H	-290	GLN	-	expression tag	UNP P42212
H	-289	PHE	-	expression tag	UNP P42212
H	-288	GLU	-	expression tag	UNP P42212
H	-287	LYS	-	expression tag	UNP P42212
H	-286	GLY	-	expression tag	UNP P42212
H	-285	GLY	-	expression tag	UNP P42212
H	-284	GLY	-	expression tag	UNP P42212
H	-283	SER	-	expression tag	UNP P42212
H	-282	GLY	-	expression tag	UNP P42212
H	-281	GLY	-	expression tag	UNP P42212
H	-280	GLY	-	expression tag	UNP P42212
H	-279	SER	-	expression tag	UNP P42212
H	-278	GLY	-	expression tag	UNP P42212
H	-277	GLY	-	expression tag	UNP P42212
H	-276	SER	-	expression tag	UNP P42212
H	-275	ALA	-	expression tag	UNP P42212

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Chain	Residue	Modelled	Actual	Comment	Reference
H	-274	TRP	-	expression tag	UNP P42212
H	-273	SER	-	expression tag	UNP P42212
H	-272	HIS	-	expression tag	UNP P42212
H	-271	PRO	-	expression tag	UNP P42212
H	-270	GLN	-	expression tag	UNP P42212
H	-269	PHE	-	expression tag	UNP P42212
H	-268	GLU	-	expression tag	UNP P42212
H	-267	LYS	-	expression tag	UNP P42212
H	-266	GLY	-	expression tag	UNP P42212
H	-265	ALA	-	expression tag	UNP P42212
H	-264	HIS	-	expression tag	UNP P42212
H	-263	HIS	-	expression tag	UNP P42212
H	-262	HIS	-	expression tag	UNP P42212
H	-261	HIS	-	expression tag	UNP P42212
H	-260	HIS	-	expression tag	UNP P42212
H	-259	HIS	-	expression tag	UNP P42212
H	-258	HIS	-	expression tag	UNP P42212
H	-257	HIS	-	expression tag	UNP P42212
H	-256	ALA	-	expression tag	UNP P42212
H	-255	ALA	-	expression tag	UNP P42212
H	-254	ALA	-	expression tag	UNP P42212
H	-253	MET	-	expression tag	UNP P42212
H	-252	VAL	-	expression tag	UNP P42212
H	-189	LEU	PHE	conflict	UNP P42212
H	-188	THR	SER	conflict	UNP P42212
H	-47	LYS	ALA	conflict	UNP P42212
H	-22	LEU	HIS	conflict	UNP P42212
H	-14	SER	-	linker	UNP P42212
H	-13	GLY	-	linker	UNP P42212
H	-12	LEU	-	linker	UNP P42212
H	-11	ARG	-	linker	UNP P42212
H	-10	SER	-	linker	UNP P42212
H	-9	GLY	-	linker	UNP P42212
H	-8	LEU	-	linker	UNP P42212
H	-7	GLU	-	linker	UNP P42212
H	-6	VAL	-	linker	UNP P42212
H	-5	LEU	-	linker	UNP P42212
H	-4	PHE	-	linker	UNP P42212
H	-3	GLN	-	linker	UNP P42212
H	-2	GLY	-	linker	UNP P42212
H	-1	PRO	-	linker	UNP P42212
H	0	GLU	-	linker	UNP P42212

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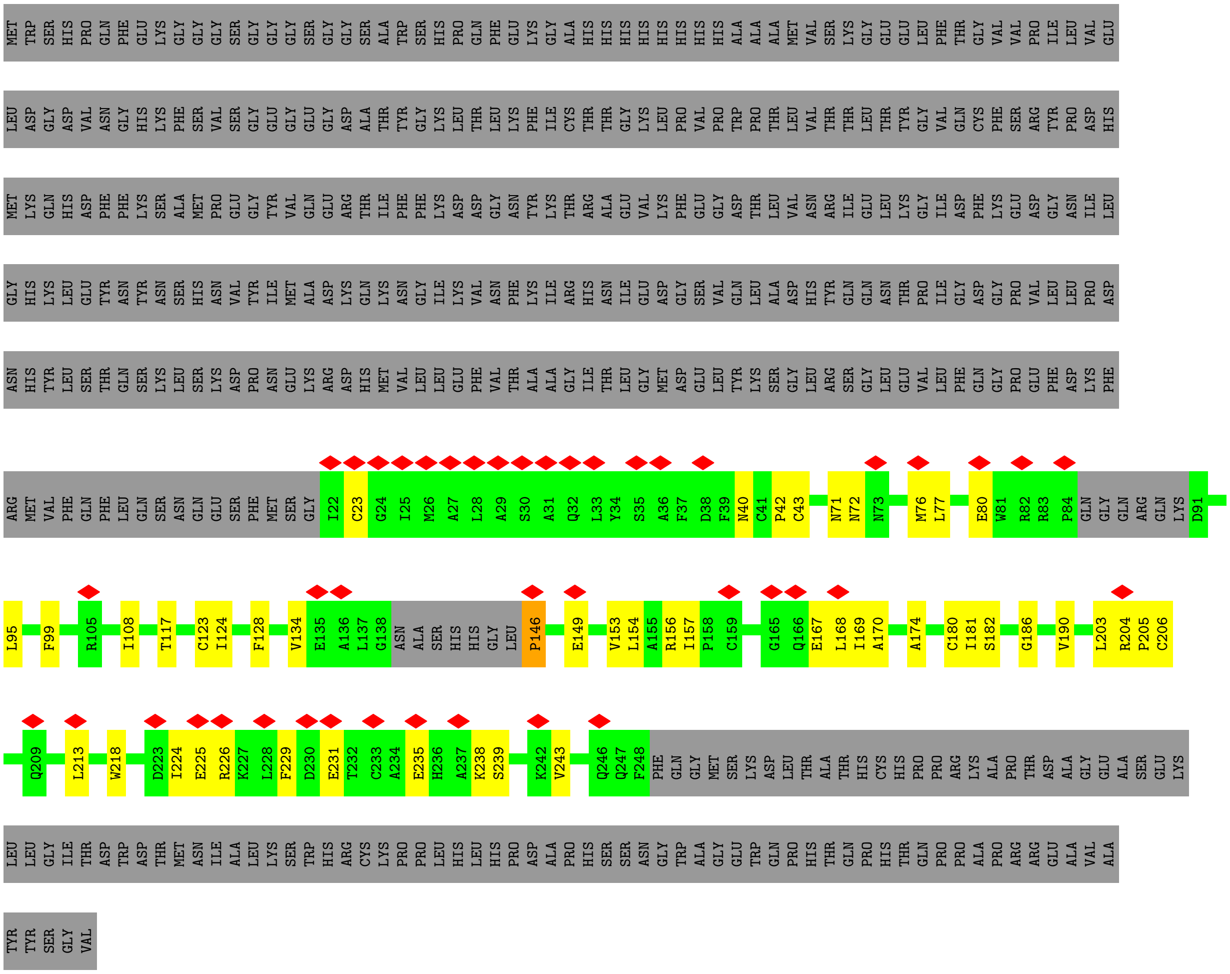
Chain	Residue	Modelled	Actual	Comment	Reference
H	1	PHE	-	linker	UNP P42212
H	315	ALA	-	insertion	UNP A0A1D5NWS1
H	316	GLY	-	insertion	UNP A0A1D5NWS1
H	317	GLU	-	insertion	UNP A0A1D5NWS1
H	318	TRP	-	insertion	UNP A0A1D5NWS1
H	319	GLN	-	insertion	UNP A0A1D5NWS1
H	320	PRO	-	insertion	UNP A0A1D5NWS1
H	321	HIS	-	insertion	UNP A0A1D5NWS1
H	322	THR	-	insertion	UNP A0A1D5NWS1
H	323	GLN	-	insertion	UNP A0A1D5NWS1
H	324	PRO	-	insertion	UNP A0A1D5NWS1
H	325	HIS	-	insertion	UNP A0A1D5NWS1
H	326	THR	-	insertion	UNP A0A1D5NWS1
H	327	GLN	-	insertion	UNP A0A1D5NWS1

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.

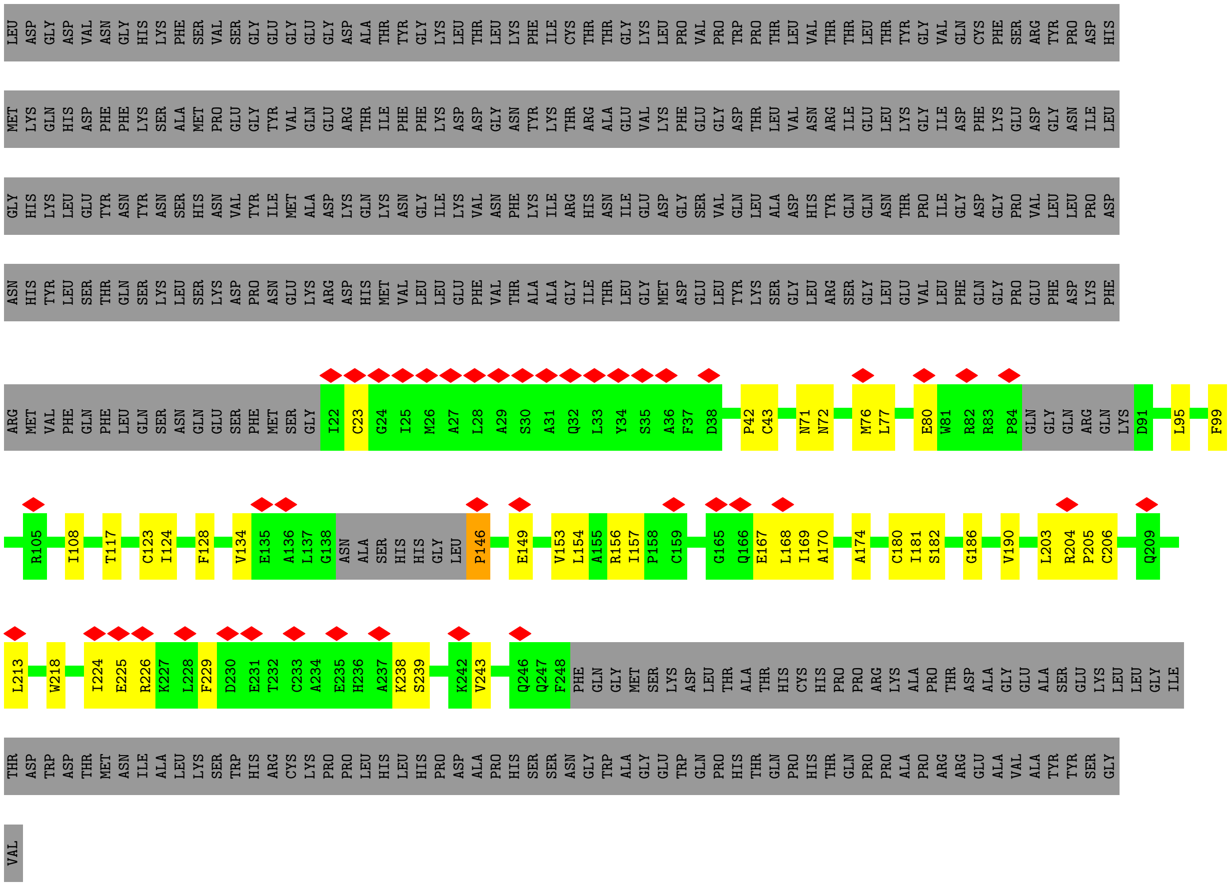
- Molecule 1: Green fluorescent protein,CALHM1 chimera

Chain A:



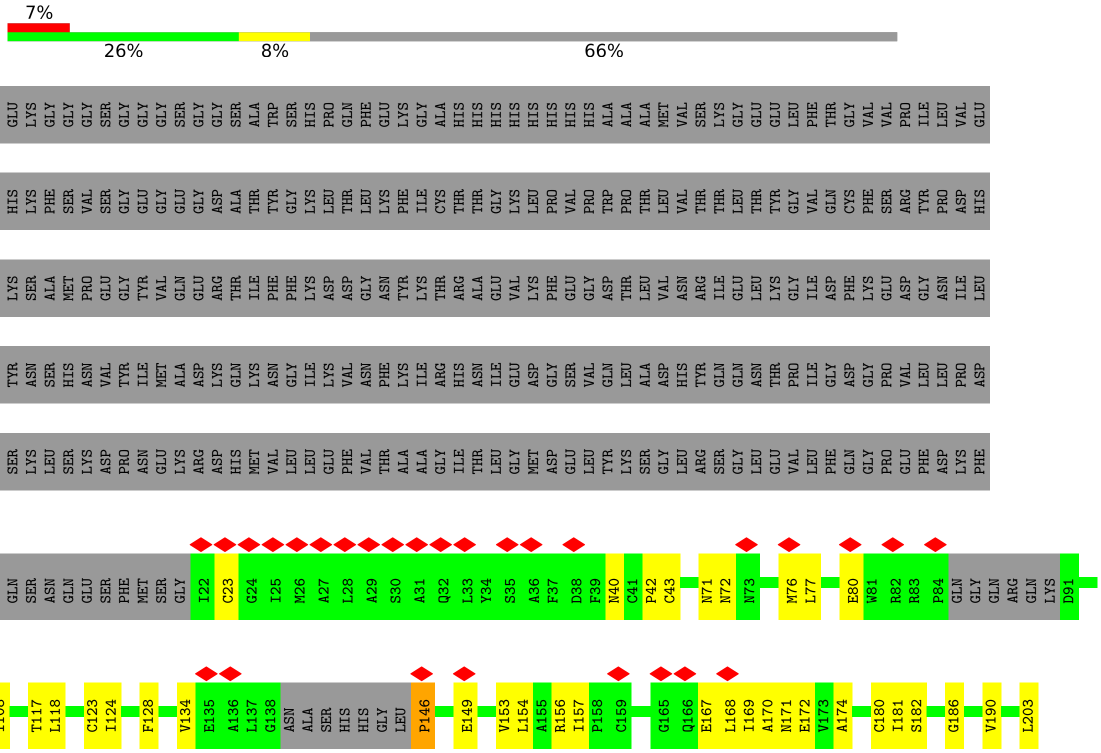
- Molecule 1: Green fluorescent protein,CALHM1 chimera

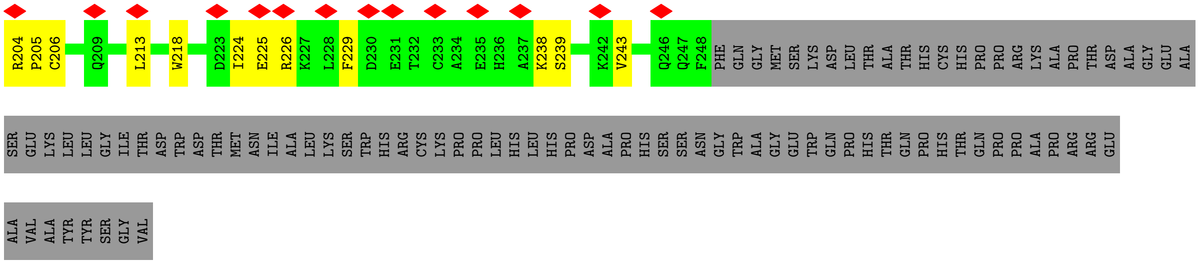
Chain B:



- Molecule 1: Green fluorescent protein,CALHM1 chimera

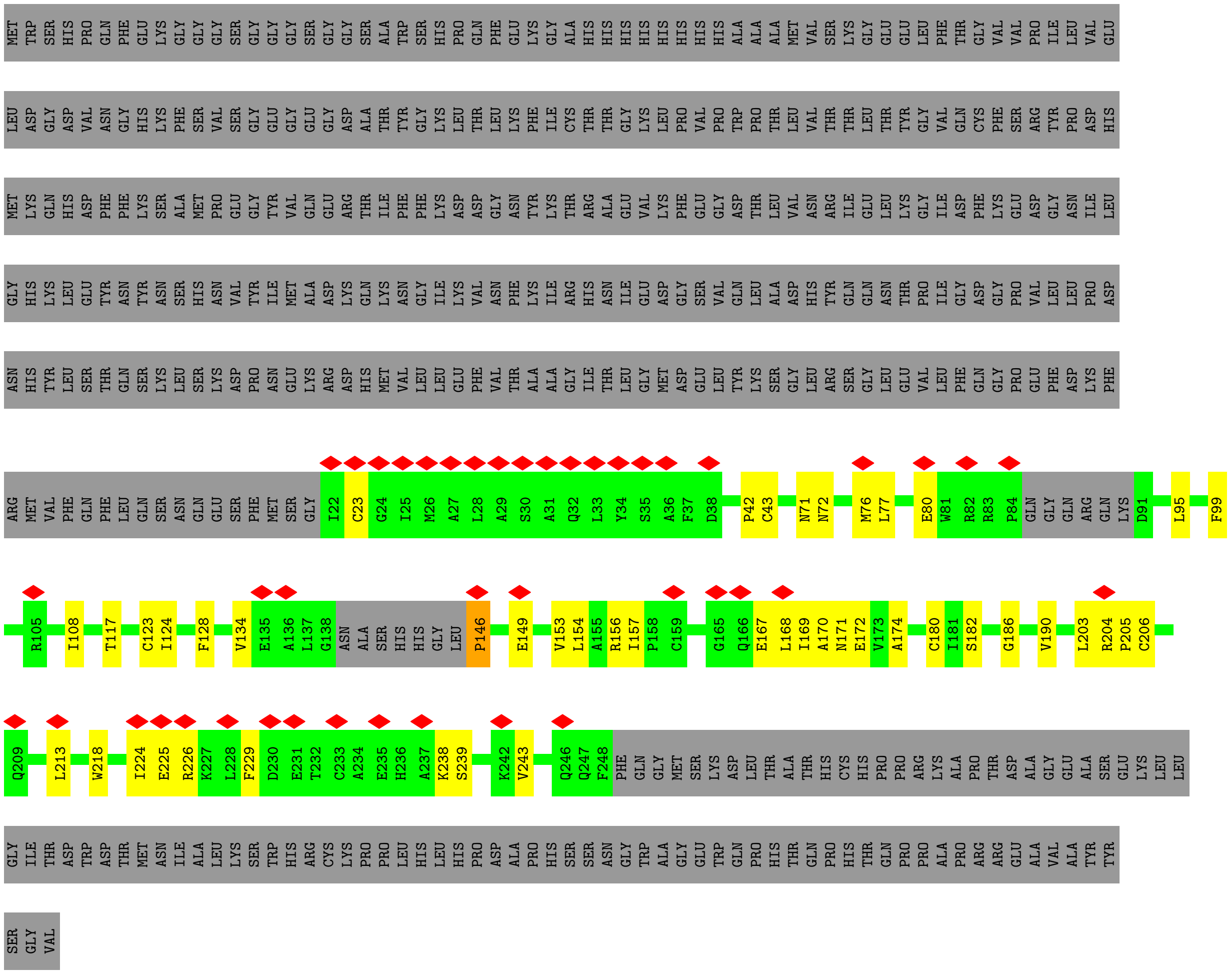
Chain C:





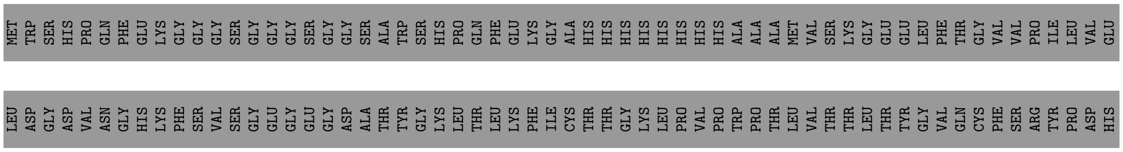
- Molecule 1: Green fluorescent protein,CALHM1 chimera

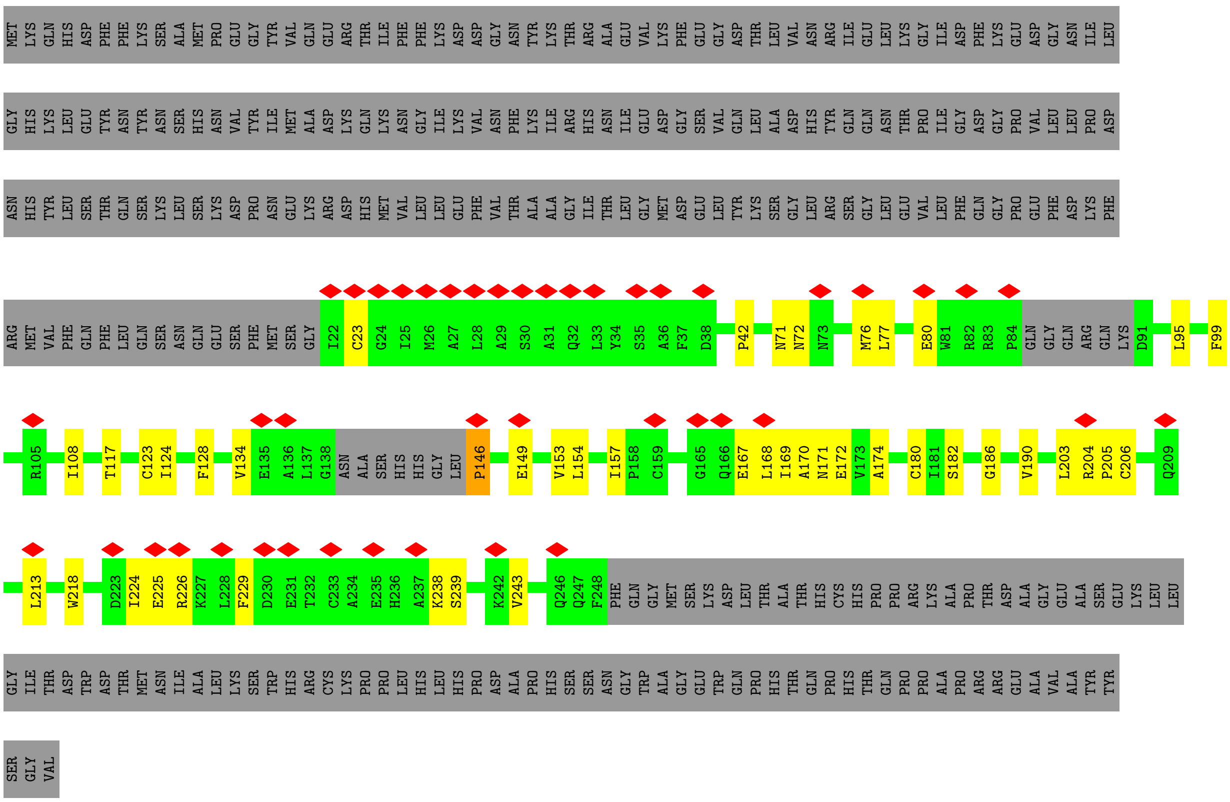
Chain D:



- Molecule 1: Green fluorescent protein,CALHM1 chimera

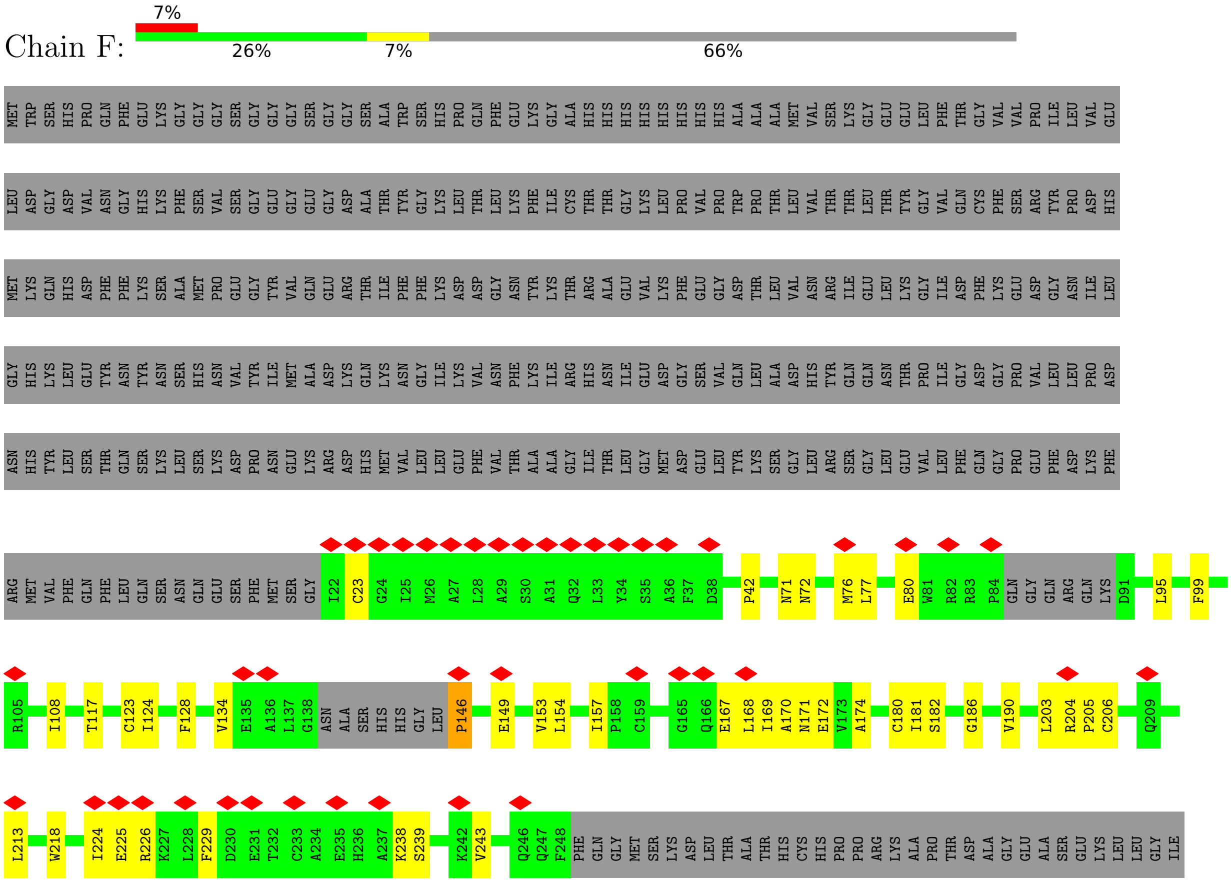
Chain E:

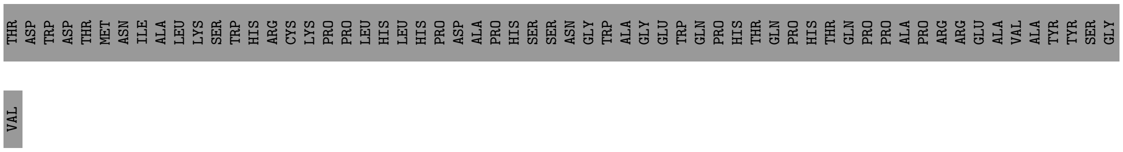




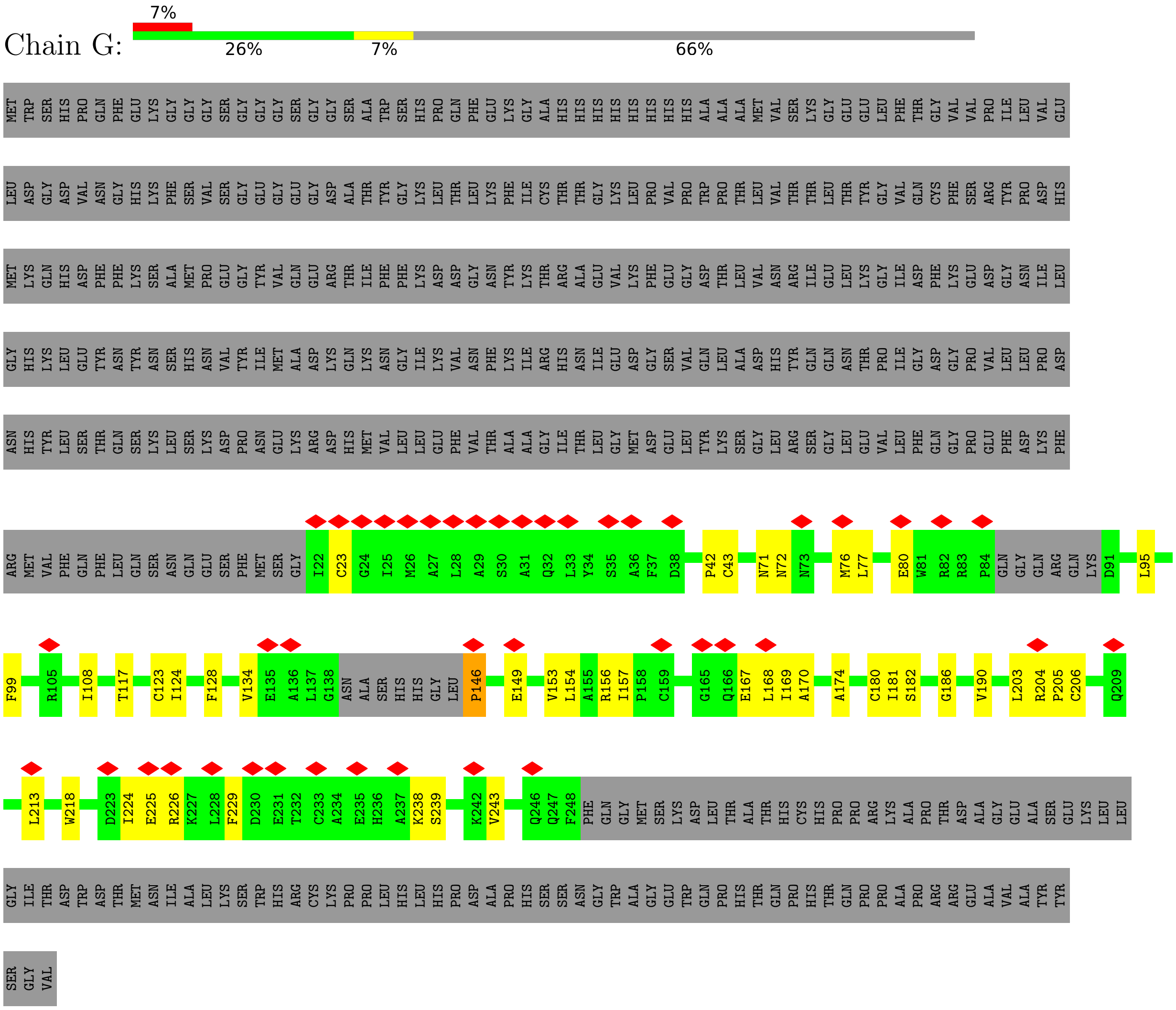
- Molecule 1: Green fluorescent protein,CALHM1 chimera

Chain F:

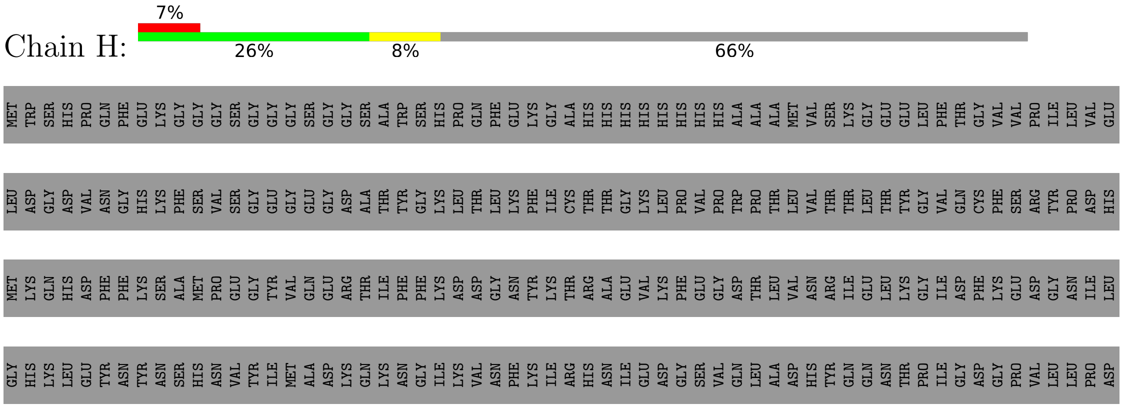


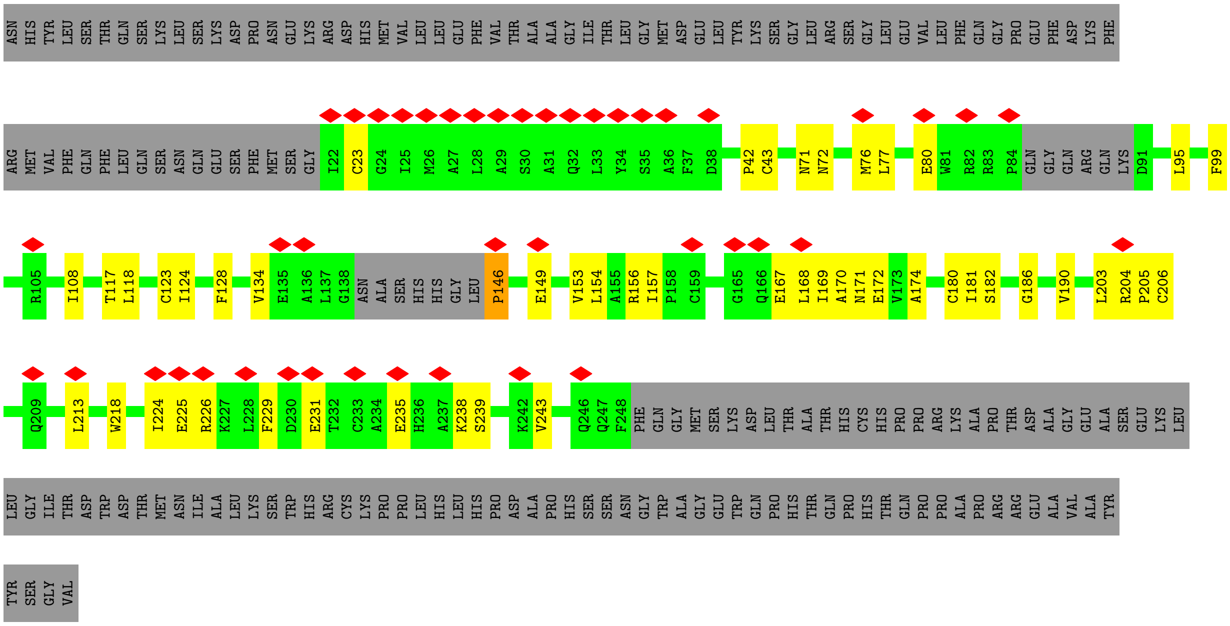


- Molecule 1: Green fluorescent protein,CALHM1 chimera



- Molecule 1: Green fluorescent protein,CALHM1 chimera




ASN HIS TYR LEU SER THR GLN SER LYS LEU SER LYS ASP PRO ASN GLU LYS ARG ASP HIS MET VAL LEU LEU GLU PHE VAL THR ALA ALA GLY ILE THR LEU GLY MET ASP GLU LEU TYR LYS SER GLY LEU ARG SER GLY LEU GLU VAL LEU PHE GLN GLY PRO GLU PHE ASP LYS PHE
ARG MET VAL PHE GLN PHE LEU GLN SER ASN GLN GLU SER PHE MET SER GLY I22 C23 G24 I25 M26 A27 L28 A29 S30 A31 Q32 L33 Y34 S35 A36 F37 D38 P42 C43 N71 N72 M76 L77 E80 W81 R82 R83 P84 GLN GLY GLN ARG GLN LYS D91 L95 F99
R105 I108 T117 L118 C123 I124 F128 V134 E135 A136 L137 G138 ASN ALA SER HIS HIS GLY LEU P146 E149 V153 L154 A155 R156 I157 P158 C159 G165 Q166 E167 L168 I169 A170 N171 E172 V173 A174 C180 I181 S182 G186 V190 L203 R204 P205 C206
Q209 L213 W218 I224 E225 R226 K227 L228 F229 D230 E231 T232 C233 A234 E235 H236 A237 K238 S239 K242 V243 Q246 Q247 F248 PHE GLN GLY MET SER LYS ASP LEU THR ALA THR HIS CYS HIS PRO PRO ARG LYS ALA PRO THR ASP ALA GLY GLU ALA SER GLU LYS LEU
LEU GLY ILE THR ASP TRP ASP THR MET ASN ILE ALA LEU LYS SER TRP HIS ARG CYS LYS PRO PRO LEU HIS LEU HIS PRO ASP ALA PRO HIS SER SER ASN GLY TRP ALA GLY GLU TRP GLN PRO HIS THR GLN PRO HIS THR GLN PRO PRO ALA PRO ARG ARG GLU ALA VAL ALA TYR
TYR SER GLY VAL

4 Experimental information ⓘ

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C8	Depositor
Number of particles used	308916	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	70	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	13.137	Depositor
Minimum map value	-5.751	Depositor
Average map value	0.045	Depositor
Map value standard deviation	0.520	Depositor
Recommended contour level	3.35	Depositor
Map size (Å)	271.36, 271.36, 271.36	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.06, 1.06, 1.06	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	0.35	0/1707	0.50	1/2317 (0.0%)
1	B	0.35	0/1707	0.50	1/2317 (0.0%)
1	C	0.35	0/1707	0.50	1/2317 (0.0%)
1	D	0.35	0/1707	0.50	1/2317 (0.0%)
1	E	0.35	0/1707	0.50	1/2317 (0.0%)
1	F	0.35	0/1707	0.50	1/2317 (0.0%)
1	G	0.35	0/1707	0.50	1/2317 (0.0%)
1	H	0.35	0/1707	0.50	1/2317 (0.0%)
All	All	0.35	0/13656	0.50	8/18536 (0.0%)

There are no bond length outliers.

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	146	PRO	CA-N-CD	-8.51	99.58	111.50
1	H	146	PRO	CA-N-CD	-8.51	99.58	111.50
1	A	146	PRO	CA-N-CD	-8.50	99.60	111.50
1	C	146	PRO	CA-N-CD	-8.50	99.60	111.50
1	E	146	PRO	CA-N-CD	-8.50	99.60	111.50
1	G	146	PRO	CA-N-CD	-8.50	99.60	111.50
1	F	146	PRO	CA-N-CD	-8.49	99.61	111.50
1	D	146	PRO	CA-N-CD	-8.48	99.63	111.50

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	1670	0	1693	36	0
1	B	1670	0	1693	33	0
1	C	1670	0	1693	37	0
1	D	1670	0	1693	34	0
1	E	1670	0	1693	33	0
1	F	1670	0	1693	34	0
1	G	1670	0	1693	34	0
1	H	1670	0	1693	36	0
All	All	13360	0	13544	253	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 (253) 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)
1:B:134:VAL:HG11	1:B:168:LEU:HB3	1.63	0.81
1:C:134:VAL:HG11	1:C:168:LEU:HB3	1.63	0.81
1:A:134:VAL:HG11	1:A:168:LEU:HB3	1.63	0.81
1:B:134:VAL:HG13	1:B:168:LEU:O	1.81	0.80
1:D:134:VAL:HG11	1:D:168:LEU:HB3	1.63	0.80
1:E:134:VAL:HG13	1:E:168:LEU:O	1.82	0.80
1:F:134:VAL:HG13	1:F:168:LEU:O	1.81	0.80
1:H:134:VAL:HG13	1:H:168:LEU:O	1.81	0.80
1:H:134:VAL:HG11	1:H:168:LEU:HB3	1.63	0.80
1:G:134:VAL:HG13	1:G:168:LEU:O	1.82	0.80
1:C:134:VAL:HG13	1:C:168:LEU:O	1.82	0.79
1:E:134:VAL:HG11	1:E:168:LEU:HB3	1.63	0.79
1:A:134:VAL:HG13	1:A:168:LEU:O	1.82	0.79
1:G:134:VAL:HG11	1:G:168:LEU:HB3	1.63	0.79
1:F:134:VAL:HG11	1:F:168:LEU:HB3	1.63	0.78
1:D:134:VAL:HG13	1:D:168:LEU:O	1.81	0.78
1:F:23:CYS:HB3	1:F:108:ILE:HD11	1.70	0.73
1:G:23:CYS:HB3	1:G:108:ILE:HD11	1.69	0.73
1:E:23:CYS:HB3	1:E:108:ILE:HD11	1.70	0.73
1:H:23:CYS:HB3	1:H:108:ILE:HD11	1.70	0.73
1:A:23:CYS:HB3	1:A:108:ILE:HD11	1.70	0.72
1:D:23:CYS:HB3	1:D:108:ILE:HD11	1.70	0.72
1:C:23:CYS:HB3	1:C:108:ILE:HD11	1.70	0.72
1:B:23:CYS:HB3	1:B:108:ILE:HD11	1.70	0.71
1:A:146:PRO:HG2	1:A:149:GLU:HB3	1.75	0.69
1:C:146:PRO:HG2	1:C:149:GLU:HB3	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:146:PRO:HG2	1:E:149:GLU:HB3	1.75	0.69
1:G:146:PRO:HG2	1:G:149:GLU:HB3	1.75	0.69
1:D:146:PRO:HG2	1:D:149:GLU:HB3	1.75	0.68
1:B:146:PRO:HG2	1:B:149:GLU:HB3	1.75	0.68
1:F:146:PRO:HG2	1:F:149:GLU:HB3	1.75	0.68
1:H:146:PRO:HG2	1:H:149:GLU:HB3	1.75	0.68
1:F:169:ILE:HG21	1:F:174:ALA:HB2	1.77	0.67
1:H:169:ILE:HG21	1:H:174:ALA:HB2	1.77	0.67
1:E:169:ILE:HG21	1:E:174:ALA:HB2	1.77	0.67
1:A:169:ILE:HG21	1:A:174:ALA:HB2	1.77	0.67
1:D:169:ILE:HG21	1:D:174:ALA:HB2	1.77	0.66
1:B:169:ILE:HG21	1:B:174:ALA:HB2	1.77	0.65
1:C:169:ILE:HG21	1:C:174:ALA:HB2	1.77	0.65
1:G:169:ILE:HG21	1:G:174:ALA:HB2	1.77	0.65
1:D:225:GLU:OE1	1:D:226:ARG:NH1	2.29	0.65
1:G:225:GLU:OE1	1:G:226:ARG:NH1	2.29	0.64
1:F:225:GLU:OE1	1:F:226:ARG:NH1	2.29	0.63
1:H:117:THR:OG1	1:H:123:CYS:SG	2.57	0.63
1:G:117:THR:OG1	1:G:123:CYS:SG	2.57	0.63
1:A:117:THR:OG1	1:A:123:CYS:SG	2.57	0.63
1:A:225:GLU:OE1	1:A:226:ARG:NH1	2.29	0.63
1:H:225:GLU:OE1	1:H:226:ARG:NH1	2.29	0.63
1:D:117:THR:OG1	1:D:123:CYS:SG	2.57	0.62
1:C:117:THR:OG1	1:C:123:CYS:SG	2.57	0.62
1:F:117:THR:OG1	1:F:123:CYS:SG	2.57	0.62
1:B:225:GLU:OE1	1:B:226:ARG:NH1	2.29	0.62
1:C:225:GLU:OE1	1:C:226:ARG:NH1	2.29	0.62
1:D:134:VAL:CG1	1:D:168:LEU:O	2.48	0.62
1:E:134:VAL:CG1	1:E:168:LEU:O	2.48	0.62
1:B:117:THR:OG1	1:B:123:CYS:SG	2.57	0.62
1:C:134:VAL:CG1	1:C:168:LEU:O	2.48	0.61
1:F:134:VAL:CG1	1:F:168:LEU:O	2.48	0.61
1:B:134:VAL:CG1	1:B:168:LEU:O	2.48	0.61
1:E:117:THR:OG1	1:E:123:CYS:SG	2.57	0.61
1:G:134:VAL:CG1	1:G:168:LEU:O	2.48	0.61
1:H:134:VAL:CG1	1:H:168:LEU:O	2.48	0.60
1:A:134:VAL:CG1	1:A:168:LEU:O	2.48	0.60
1:F:76:MET:SD	1:F:218:TRP:NE1	2.74	0.60
1:E:225:GLU:OE1	1:E:226:ARG:NH1	2.29	0.60
1:A:76:MET:SD	1:A:218:TRP:NE1	2.74	0.59
1:G:76:MET:SD	1:G:218:TRP:NE1	2.74	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:167:GLU:HG3	1:D:168:LEU:HG	1.86	0.58
1:C:167:GLU:HG3	1:C:168:LEU:HG	1.86	0.58
1:E:167:GLU:HG3	1:E:168:LEU:HG	1.86	0.58
1:B:167:GLU:HG3	1:B:168:LEU:HG	1.86	0.58
1:A:167:GLU:HG3	1:A:168:LEU:HG	1.86	0.58
1:H:167:GLU:HG3	1:H:168:LEU:HG	1.86	0.58
1:G:167:GLU:HG3	1:G:168:LEU:HG	1.86	0.58
1:H:76:MET:SD	1:H:218:TRP:NE1	2.74	0.57
1:F:167:GLU:HG3	1:F:168:LEU:HG	1.86	0.57
1:D:76:MET:SD	1:D:218:TRP:NE1	2.74	0.56
1:E:76:MET:SD	1:E:218:TRP:NE1	2.74	0.55
1:C:149:GLU:O	1:C:153:VAL:HG23	2.07	0.55
1:D:149:GLU:O	1:D:153:VAL:HG23	2.07	0.54
1:E:149:GLU:O	1:E:153:VAL:HG23	2.07	0.54
1:F:149:GLU:O	1:F:153:VAL:HG23	2.07	0.54
1:A:149:GLU:O	1:A:153:VAL:HG23	2.07	0.54
1:B:76:MET:SD	1:B:218:TRP:NE1	2.74	0.54
1:B:149:GLU:O	1:B:153:VAL:HG23	2.07	0.54
1:C:76:MET:SD	1:C:218:TRP:NE1	2.74	0.54
1:H:149:GLU:O	1:H:153:VAL:HG23	2.07	0.53
1:G:149:GLU:O	1:G:153:VAL:HG23	2.07	0.53
1:H:154:LEU:HA	1:H:157:ILE:HG13	1.91	0.52
1:D:154:LEU:HA	1:D:157:ILE:HG13	1.91	0.52
1:G:154:LEU:HA	1:G:157:ILE:HG13	1.91	0.52
1:A:154:LEU:HA	1:A:157:ILE:HG13	1.91	0.52
1:C:154:LEU:HA	1:C:157:ILE:HG13	1.91	0.51
1:A:203:LEU:C	1:A:205:PRO:HD2	2.30	0.51
1:B:154:LEU:HA	1:B:157:ILE:HG13	1.91	0.51
1:D:203:LEU:C	1:D:205:PRO:HD2	2.30	0.51
1:E:154:LEU:HA	1:E:157:ILE:HG13	1.91	0.51
1:H:203:LEU:C	1:H:205:PRO:HD2	2.30	0.51
1:G:203:LEU:C	1:G:205:PRO:HD2	2.30	0.51
1:B:203:LEU:C	1:B:205:PRO:HD2	2.31	0.51
1:C:203:LEU:C	1:C:205:PRO:HD2	2.30	0.51
1:F:154:LEU:HA	1:F:157:ILE:HG13	1.91	0.51
1:E:203:LEU:C	1:E:205:PRO:HD2	2.30	0.51
1:C:71:ASN:OD1	1:C:72:ASN:N	2.44	0.51
1:B:71:ASN:OD1	1:B:72:ASN:N	2.44	0.51
1:D:71:ASN:OD1	1:D:72:ASN:N	2.44	0.50
1:F:203:LEU:C	1:F:205:PRO:HD2	2.31	0.50
1:H:71:ASN:OD1	1:H:72:ASN:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:71:ASN:OD1	1:G:72:ASN:N	2.44	0.50
1:A:71:ASN:OD1	1:A:72:ASN:N	2.44	0.50
1:E:71:ASN:OD1	1:E:72:ASN:N	2.44	0.50
1:A:146:PRO:HD2	1:A:146:PRO:O	2.12	0.50
1:D:146:PRO:HD2	1:D:146:PRO:O	2.12	0.49
1:B:146:PRO:HD2	1:B:146:PRO:O	2.12	0.49
1:E:146:PRO:HD2	1:E:146:PRO:O	2.12	0.49
1:F:71:ASN:OD1	1:F:72:ASN:N	2.44	0.49
1:C:146:PRO:HD2	1:C:146:PRO:O	2.12	0.49
1:F:146:PRO:HD2	1:F:146:PRO:O	2.12	0.49
1:H:146:PRO:HD2	1:H:146:PRO:O	2.12	0.49
1:G:146:PRO:HD2	1:G:146:PRO:O	2.12	0.48
1:E:213:LEU:HG	1:F:229:PHE:CZ	2.49	0.48
1:A:229:PHE:CZ	1:H:213:LEU:HG	2.49	0.48
1:B:169:ILE:HG22	1:B:170:ALA:O	2.14	0.48
1:C:204:ARG:O	1:C:206:CYS:N	2.47	0.48
1:B:204:ARG:O	1:B:206:CYS:N	2.47	0.48
1:H:204:ARG:O	1:H:206:CYS:N	2.47	0.48
1:F:213:LEU:HG	1:G:229:PHE:CZ	2.49	0.47
1:B:213:LEU:HG	1:C:229:PHE:CZ	2.49	0.47
1:C:169:ILE:HG22	1:C:170:ALA:O	2.14	0.47
1:G:204:ARG:O	1:G:206:CYS:N	2.47	0.47
1:D:204:ARG:O	1:D:206:CYS:N	2.47	0.47
1:B:77:LEU:HD11	1:B:99:PHE:HB2	1.97	0.47
1:C:213:LEU:HG	1:D:229:PHE:CZ	2.49	0.47
1:G:213:LEU:HG	1:H:229:PHE:CZ	2.49	0.47
1:B:224:ILE:HG21	1:C:238:LYS:HA	1.97	0.47
1:E:204:ARG:O	1:E:206:CYS:N	2.47	0.47
1:E:224:ILE:HG21	1:F:238:LYS:HA	1.97	0.47
1:E:169:ILE:HG22	1:E:170:ALA:O	2.14	0.47
1:A:77:LEU:HD11	1:A:99:PHE:HB2	1.97	0.47
1:A:204:ARG:O	1:A:206:CYS:N	2.47	0.47
1:A:213:LEU:HG	1:B:229:PHE:CZ	2.49	0.47
1:D:124:ILE:HB	1:D:182:SER:HB2	1.97	0.47
1:D:169:ILE:HG22	1:D:170:ALA:O	2.14	0.47
1:G:169:ILE:HG22	1:G:170:ALA:O	2.14	0.47
1:H:169:ILE:HG22	1:H:170:ALA:O	2.14	0.47
1:C:77:LEU:HD11	1:C:99:PHE:HB2	1.97	0.47
1:D:77:LEU:HD11	1:D:99:PHE:HB2	1.97	0.47
1:F:124:ILE:HB	1:F:182:SER:HB2	1.97	0.47
1:A:169:ILE:HG22	1:A:170:ALA:O	2.14	0.47

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Atom-1	**Atom-2**	**Interatomic distance (Å)**	**Clash overlap (Å)**
1:D:224:ILE:HG21	1:E:238:LYS:HA	1.97	0.47
1:H:77:LEU:HD11	1:H:99:PHE:HB2	1.97	0.47
1:A:80:GLU:HB3	1:A:95:LEU:HD11	1.97	0.47
1:A:238:LYS:HA	1:H:224:ILE:HG21	1.97	0.47
1:F:169:ILE:HG22	1:F:170:ALA:O	2.14	0.47
1:C:80:GLU:HB3	1:C:95:LEU:HD11	1.97	0.46
1:E:77:LEU:HD11	1:E:99:PHE:HB2	1.97	0.46
1:A:124:ILE:HG23	1:A:128:PHE:HD2	1.81	0.46
1:F:204:ARG:O	1:F:206:CYS:N	2.47	0.46
1:C:224:ILE:HG21	1:D:238:LYS:HA	1.97	0.46
1:D:213:LEU:HG	1:E:229:PHE:CZ	2.49	0.46
1:G:77:LEU:HD11	1:G:99:PHE:HB2	1.97	0.46
1:G:124:ILE:HG23	1:G:128:PHE:HD2	1.81	0.46
1:B:124:ILE:HB	1:B:182:SER:HB2	1.97	0.46
1:C:124:ILE:HG23	1:C:128:PHE:HD2	1.81	0.46
1:E:124:ILE:HB	1:E:182:SER:HB2	1.97	0.46
1:F:224:ILE:HG21	1:G:238:LYS:HA	1.97	0.46
1:G:224:ILE:HG21	1:H:238:LYS:HA	1.97	0.46
1:F:77:LEU:HD11	1:F:99:PHE:HB2	1.97	0.46
1:H:168:LEU:O	1:H:169:ILE:HG12	2.16	0.46
1:E:124:ILE:HG23	1:E:128:PHE:HD2	1.81	0.46
1:G:80:GLU:HB3	1:G:95:LEU:HD11	1.97	0.46
1:A:168:LEU:O	1:A:169:ILE:HG12	2.16	0.46
1:G:124:ILE:HB	1:G:182:SER:HB2	1.97	0.46
1:G:168:LEU:O	1:G:169:ILE:HG12	2.16	0.46
1:H:124:ILE:HB	1:H:182:SER:HB2	1.97	0.46
1:A:224:ILE:HG21	1:B:238:LYS:HA	1.97	0.46
1:D:168:LEU:O	1:D:169:ILE:HG12	2.16	0.46
1:F:168:LEU:O	1:F:169:ILE:HG12	2.16	0.46
1:B:168:LEU:O	1:B:169:ILE:HG12	2.16	0.45
1:C:124:ILE:HB	1:C:182:SER:HB2	1.97	0.45
1:E:80:GLU:HB3	1:E:95:LEU:HD11	1.97	0.45
1:E:168:LEU:O	1:E:169:ILE:HG12	2.16	0.45
1:D:124:ILE:HG23	1:D:128:PHE:HD2	1.81	0.45
1:F:124:ILE:HG23	1:F:128:PHE:HD2	1.81	0.45
1:C:168:LEU:O	1:C:169:ILE:HG12	2.16	0.45
1:C:146:PRO:HG2	1:C:149:GLU:CB	2.46	0.45
1:B:80:GLU:HB3	1:B:95:LEU:HD11	1.98	0.45
1:D:239:SER:O	1:D:243:VAL:HG23	2.17	0.45
1:A:239:SER:O	1:A:243:VAL:HG23	2.17	0.45
1:B:239:SER:O	1:B:243:VAL:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:80:GLU:HB3	1:H:95:LEU:HD11	1.98	0.45
1:D:80:GLU:HB3	1:D:95:LEU:HD11	1.97	0.45
1:G:239:SER:O	1:G:243:VAL:HG23	2.17	0.45
1:H:239:SER:O	1:H:243:VAL:HG23	2.17	0.45
1:A:124:ILE:HB	1:A:182:SER:HB2	1.97	0.45
1:B:124:ILE:HG23	1:B:128:PHE:HD2	1.81	0.45
1:C:239:SER:O	1:C:243:VAL:HG23	2.17	0.45
1:E:239:SER:O	1:E:243:VAL:HG23	2.17	0.45
1:H:124:ILE:HG23	1:H:128:PHE:HD2	1.81	0.45
1:A:95:LEU:HD23	1:A:95:LEU:HA	1.89	0.44
1:F:239:SER:O	1:F:243:VAL:HG23	2.17	0.44
1:A:180:CYS:SG	1:B:42:PRO:HG3	2.58	0.44
1:F:80:GLU:HB3	1:F:95:LEU:HD11	1.98	0.44
1:G:146:PRO:HG2	1:G:149:GLU:CB	2.46	0.44
1:B:146:PRO:HG2	1:B:149:GLU:CB	2.46	0.43
1:E:180:CYS:SG	1:F:42:PRO:HG3	2.58	0.43
1:G:180:CYS:SG	1:H:42:PRO:HG3	2.58	0.43
1:E:95:LEU:HD23	1:E:95:LEU:HA	1.89	0.43
1:A:42:PRO:HG3	1:H:180:CYS:SG	2.58	0.43
1:D:180:CYS:SG	1:E:42:PRO:HG3	2.58	0.43
1:B:180:CYS:SG	1:C:42:PRO:HG3	2.58	0.43
1:F:146:PRO:HG2	1:F:149:GLU:CB	2.46	0.43
1:C:180:CYS:SG	1:D:42:PRO:HG3	2.58	0.43
1:F:180:CYS:SG	1:G:42:PRO:HG3	2.58	0.43
1:E:146:PRO:HG2	1:E:149:GLU:CB	2.46	0.43
1:G:95:LEU:HD23	1:G:95:LEU:HA	1.89	0.42
1:A:181:ILE:HD13	1:A:181:ILE:HA	1.94	0.42
1:H:146:PRO:HG2	1:H:149:GLU:CB	2.46	0.42
1:F:181:ILE:HD13	1:F:181:ILE:HA	1.94	0.42
1:B:181:ILE:HD13	1:B:181:ILE:HA	1.94	0.42
1:C:95:LEU:HD23	1:C:95:LEU:HA	1.89	0.42
1:H:118:LEU:HD23	1:H:118:LEU:HA	1.88	0.42
1:A:146:PRO:HG2	1:A:149:GLU:CB	2.46	0.41
1:D:146:PRO:HG2	1:D:149:GLU:CB	2.46	0.41
1:H:181:ILE:HD13	1:H:181:ILE:HA	1.94	0.41
1:C:186:GLY:O	1:C:190:VAL:HG23	2.21	0.41
1:G:181:ILE:HD13	1:G:181:ILE:HA	1.94	0.41
1:F:186:GLY:O	1:F:190:VAL:HG23	2.21	0.41
1:G:186:GLY:O	1:G:190:VAL:HG23	2.21	0.41
1:H:186:GLY:O	1:H:190:VAL:HG23	2.21	0.41
1:A:186:GLY:O	1:A:190:VAL:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:95:LEU:HD23	1:F:95:LEU:HA	1.89	0.41
1:E:186:GLY:O	1:E:190:VAL:HG23	2.21	0.41
1:B:186:GLY:O	1:B:190:VAL:HG23	2.21	0.41
1:D:171:ASN:HB3	1:D:172:GLU:OE2	2.21	0.41
1:E:171:ASN:HB3	1:E:172:GLU:OE2	2.21	0.41
1:C:171:ASN:HB3	1:C:172:GLU:OE2	2.21	0.41
1:C:43:CYS:HB3	1:C:156:ARG:HA	2.04	0.40
1:C:118:LEU:HD23	1:C:118:LEU:HA	1.87	0.40
1:F:171:ASN:HB3	1:F:172:GLU:OE2	2.21	0.40
1:A:231:GLU:O	1:A:235:GLU:HG2	2.22	0.40
1:H:43:CYS:HB3	1:H:156:ARG:HA	2.04	0.40
1:H:231:GLU:O	1:H:235:GLU:HG2	2.22	0.40
1:A:40:ASN:N	1:A:40:ASN:OD1	2.55	0.40
1:A:43:CYS:HB3	1:A:156:ARG:HA	2.04	0.40
1:B:43:CYS:HB3	1:B:156:ARG:HA	2.04	0.40
1:D:43:CYS:HB3	1:D:156:ARG:HA	2.04	0.40
1:D:186:GLY:O	1:D:190:VAL:HG23	2.21	0.40
1:D:224:ILE:HD13	1:D:224:ILE:HA	1.92	0.40
1:G:43:CYS:HB3	1:G:156:ARG:HA	2.04	0.40
1:C:40:ASN:OD1	1:C:40:ASN:N	2.55	0.40
1:C:181:ILE:HD13	1:C:181:ILE:HA	1.94	0.40
1:H:171:ASN:HB3	1:H:172:GLU:OE2	2.21	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	A	208/638 (33%)	193 (93%)	15 (7%)	0	100	100
1	B	208/638 (33%)	193 (93%)	15 (7%)	0	100	100
1	C	208/638 (33%)	193 (93%)	15 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	D	208/638 (33%)	192 (92%)	16 (8%)	0	100	100
1	E	208/638 (33%)	193 (93%)	15 (7%)	0	100	100
1	F	208/638 (33%)	193 (93%)	15 (7%)	0	100	100
1	G	208/638 (33%)	193 (93%)	15 (7%)	0	100	100
1	H	208/638 (33%)	192 (92%)	16 (8%)	0	100	100
All	All	1664/5104 (33%)	1542 (93%)	122 (7%)	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	178/541 (33%)	178 (100%)	0	100	100
1	B	178/541 (33%)	178 (100%)	0	100	100
1	C	178/541 (33%)	178 (100%)	0	100	100
1	D	178/541 (33%)	178 (100%)	0	100	100
1	E	178/541 (33%)	178 (100%)	0	100	100
1	F	178/541 (33%)	178 (100%)	0	100	100
1	G	178/541 (33%)	178 (100%)	0	100	100
1	H	178/541 (33%)	178 (100%)	0	100	100
All	All	1424/4328 (33%)	1424 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (7) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	48	ASN
1	B	48	ASN
1	C	48	ASN

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Mol	Chain	Res	Type
1	D	48	ASN
1	E	48	ASN
1	F	48	ASN
1	G	48	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 ⓘ

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.

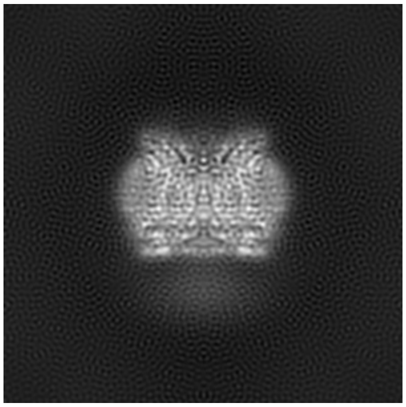
6 Map visualisation ⓘ

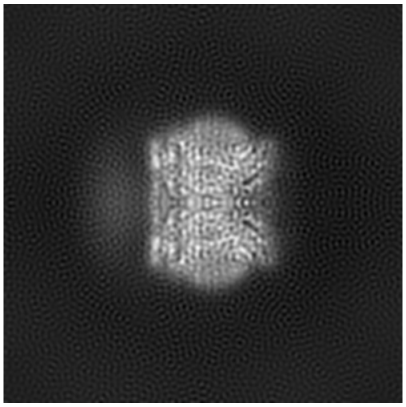
This section contains visualisations of the EMDB entry EMD-21143. These allow visual inspection of the internal detail of the map and identification of artifacts.

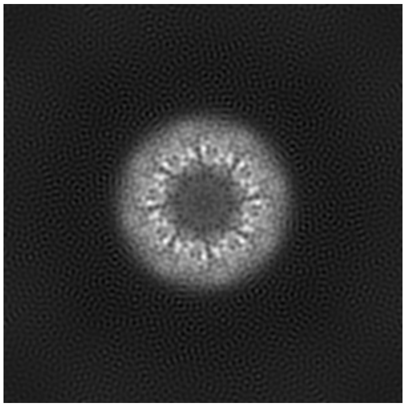
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections ⓘ

6.1.1 Primary map


X

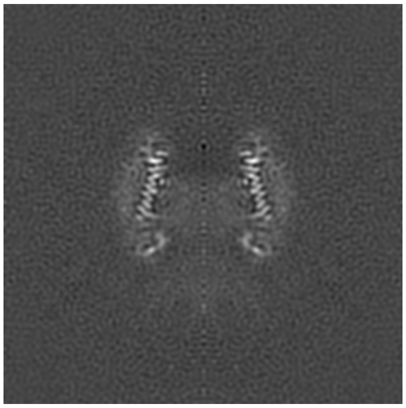

Y

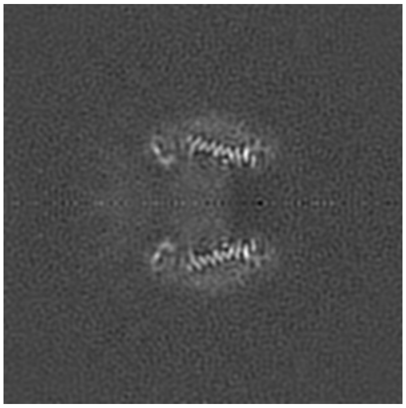

Z

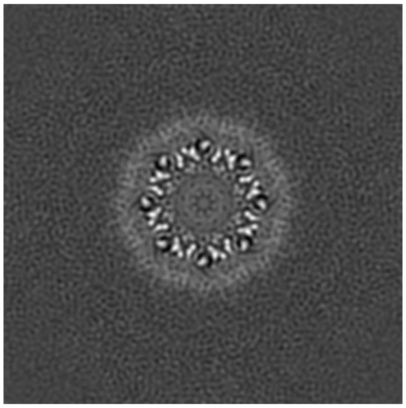
The images above show the map projected in three orthogonal directions.

6.2 Central slices ⓘ

6.2.1 Primary map


X Index: 128

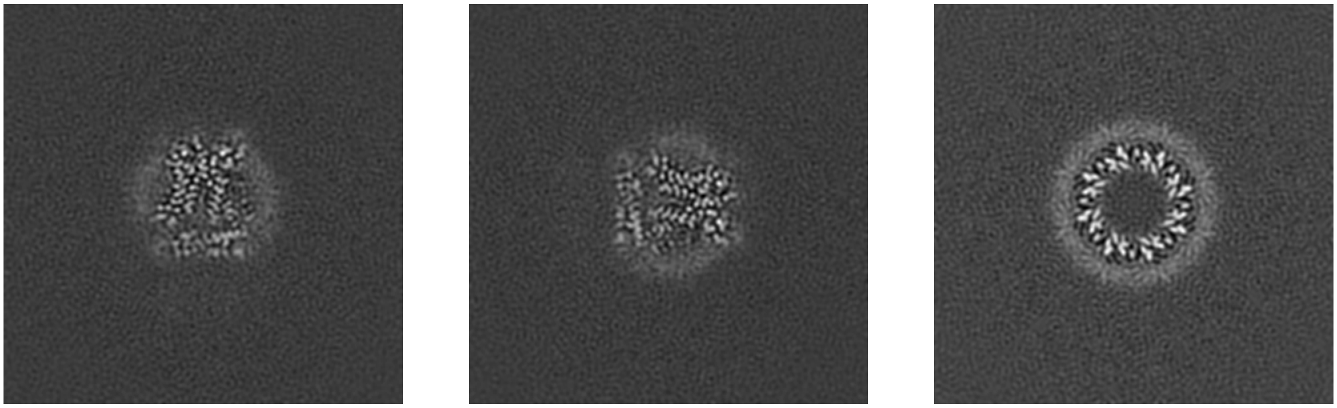

Y Index: 128


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

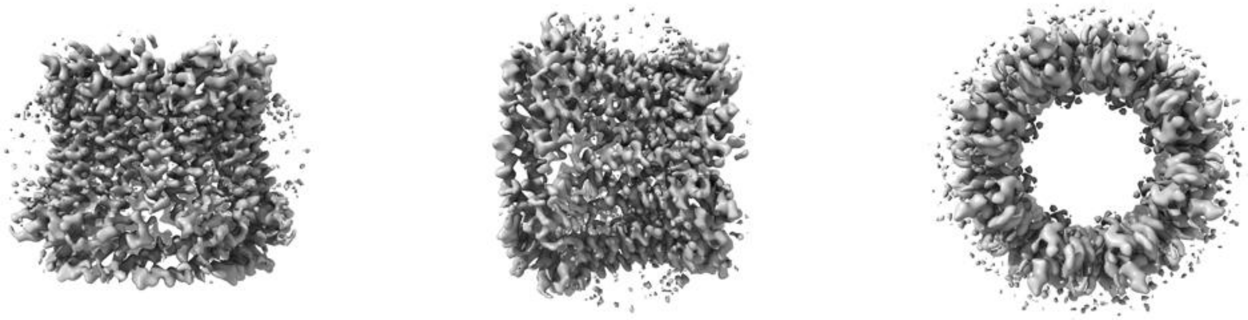


X Index: 158 Y Index: 158 Z Index: 148

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 3.35. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

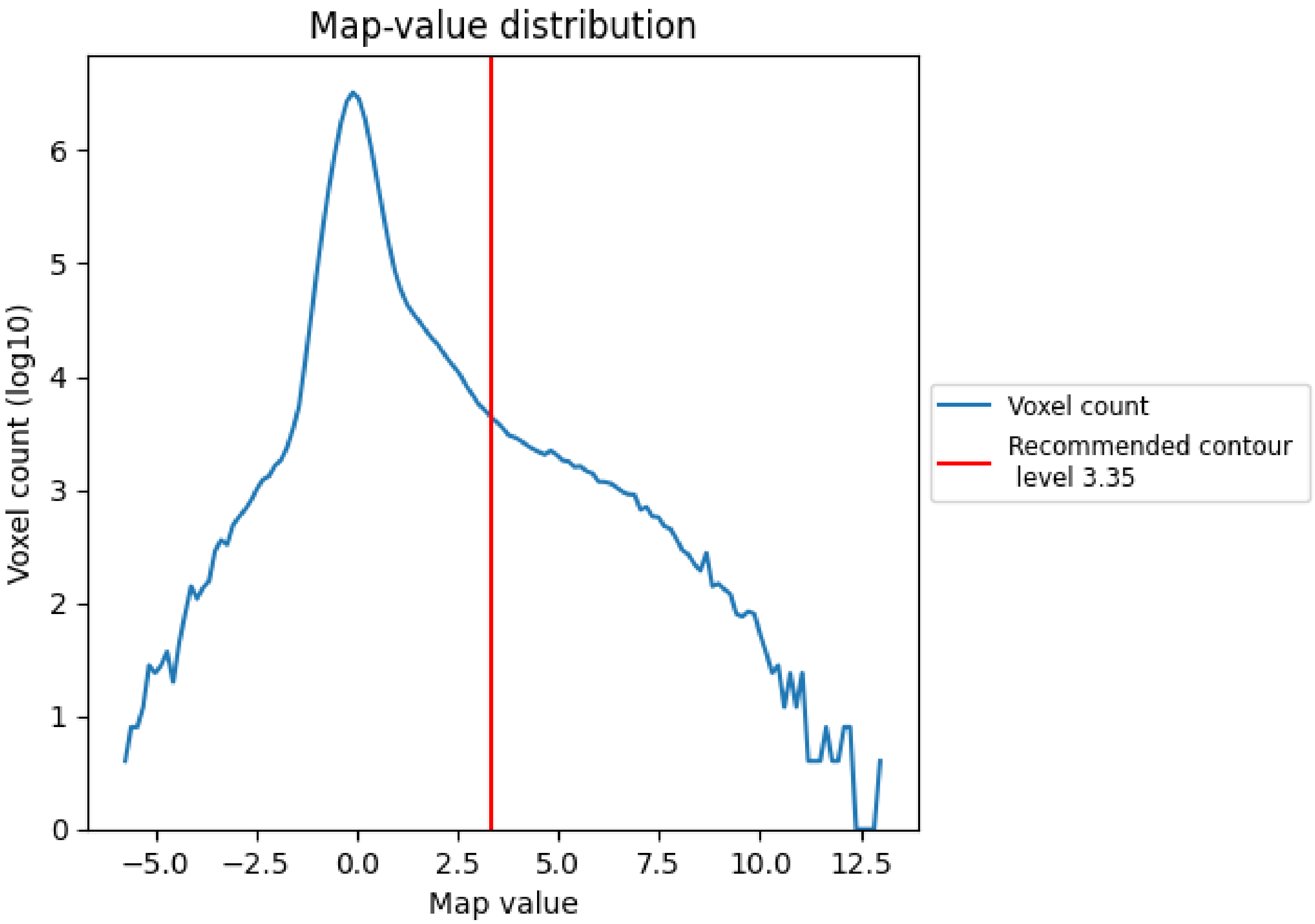
6.5 Mask visualisation ⓘ

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

7 Map analysis ⓘ

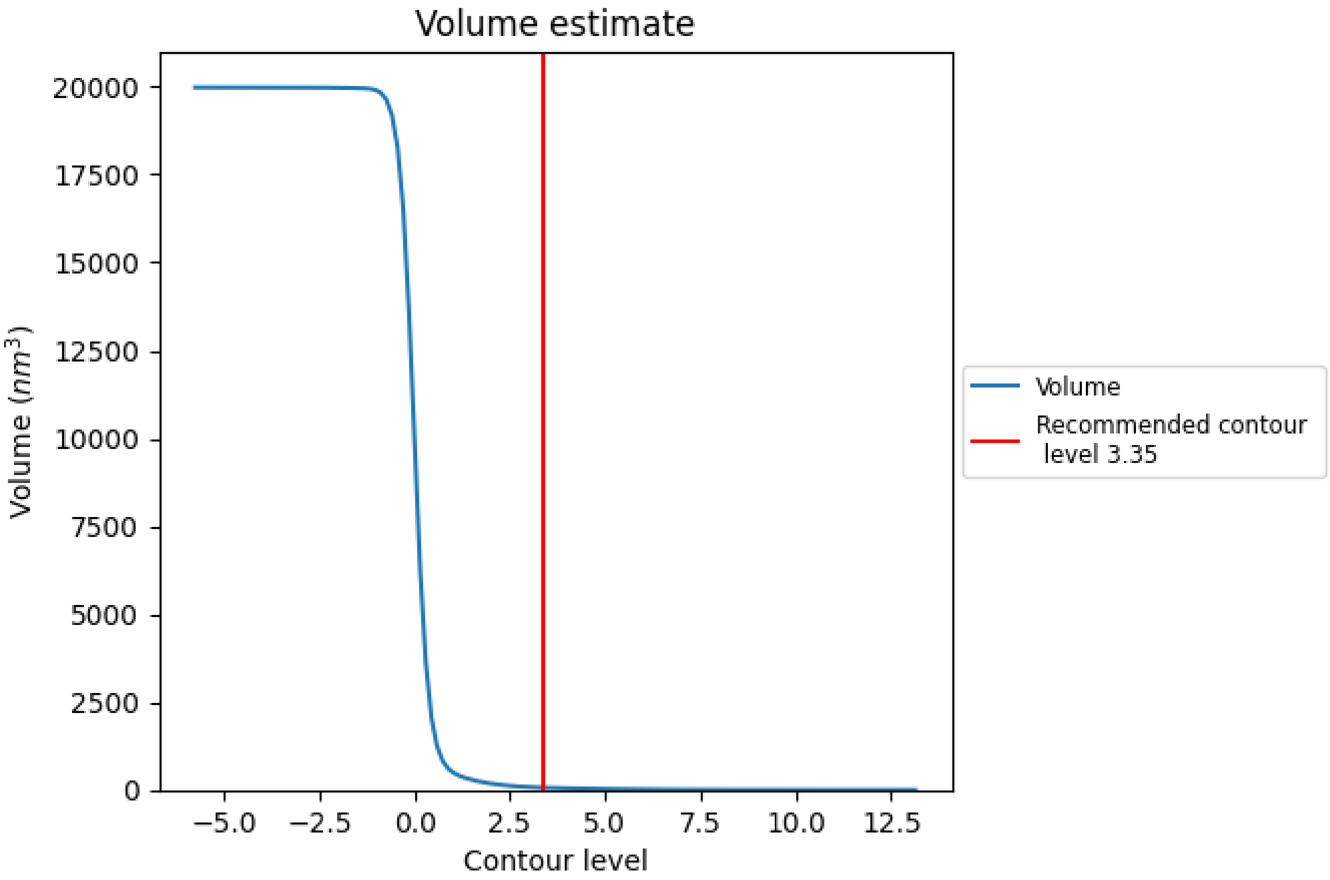
This section contains the results of statistical analysis of the map.

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.

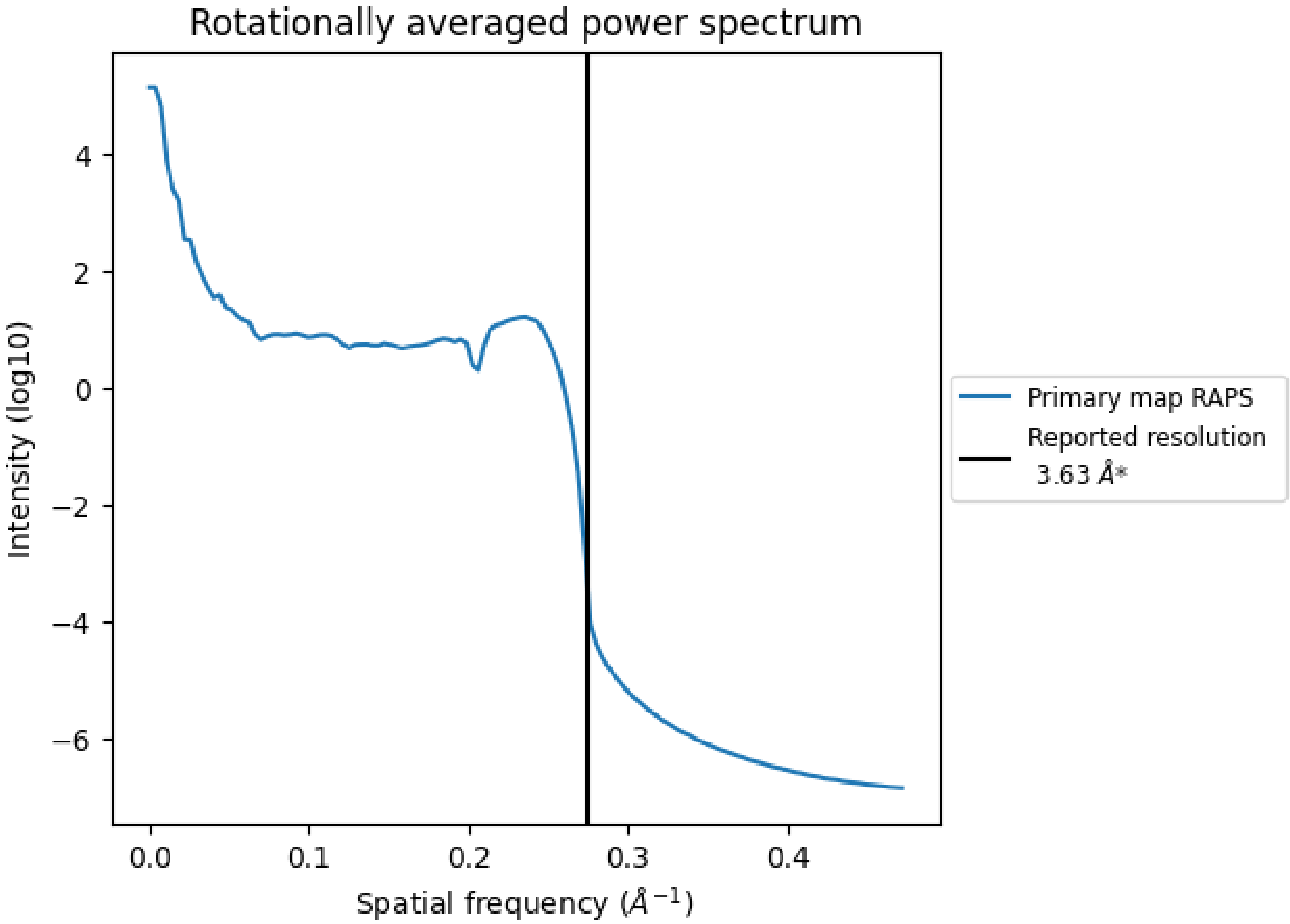
7.2 Volume estimate ⓘ



The volume at the recommended contour level is 67 nm^3; this corresponds to an approximate mass of 60 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 0.275 $Å^{-1}$

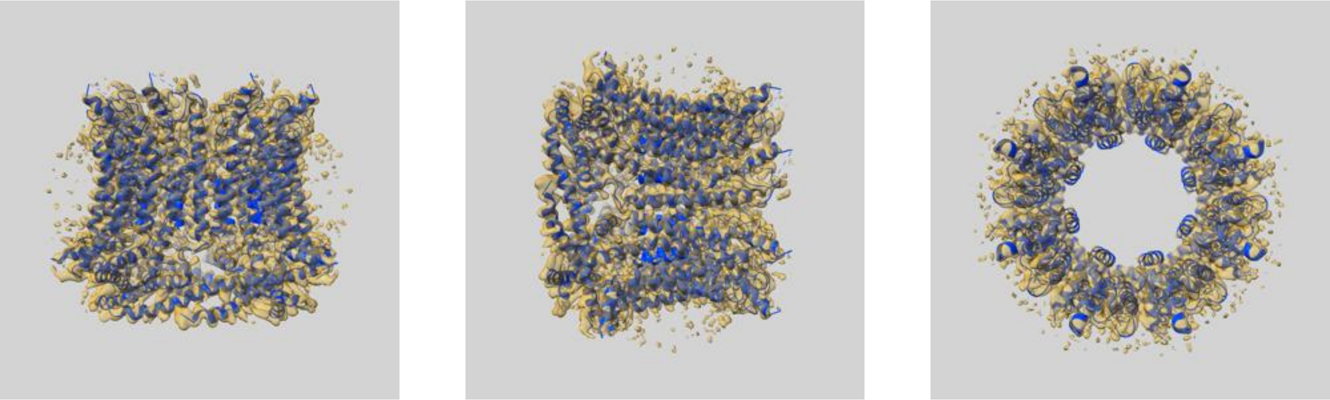
8 Fourier-Shell correlation (i)

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-21143 and PDB model 6VAM. Per-residue inclusion information can be found in section 3 on page 19.

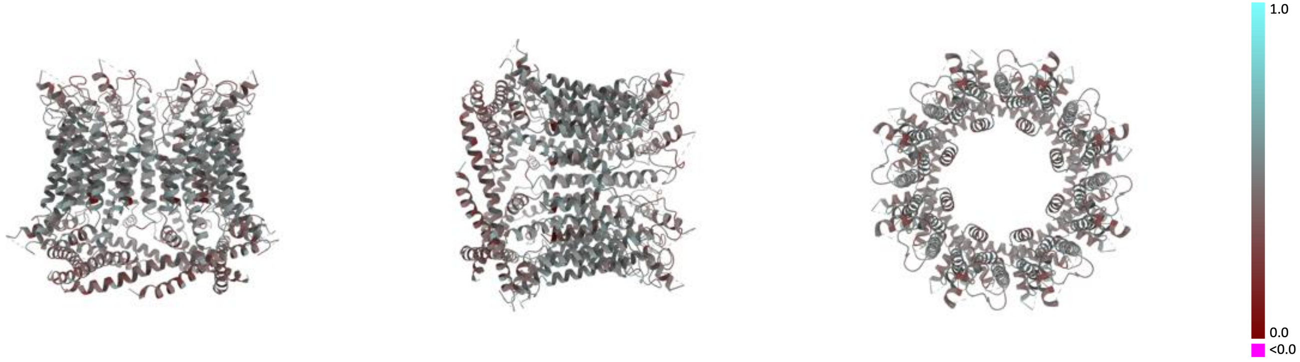
9.1 Map-model overlay ⓘ



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 3.35 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.

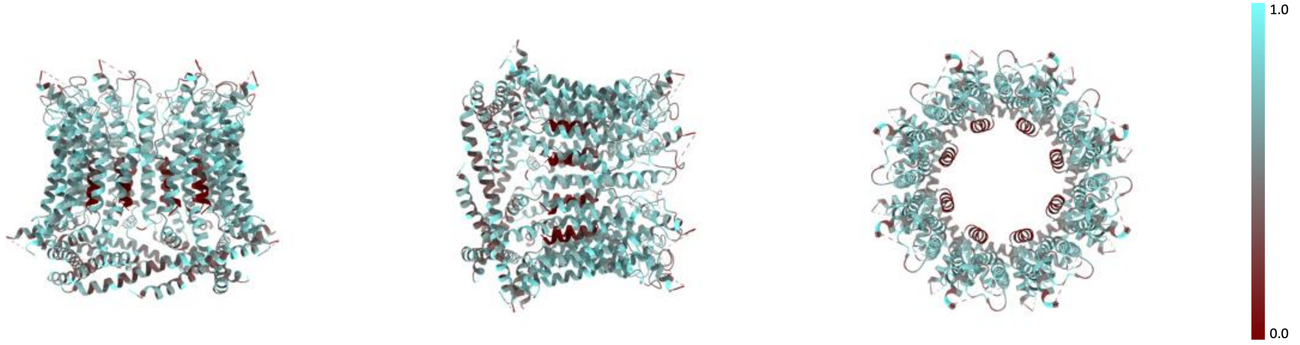
9.2 Q-score mapped to coordinate model ⓘ



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.

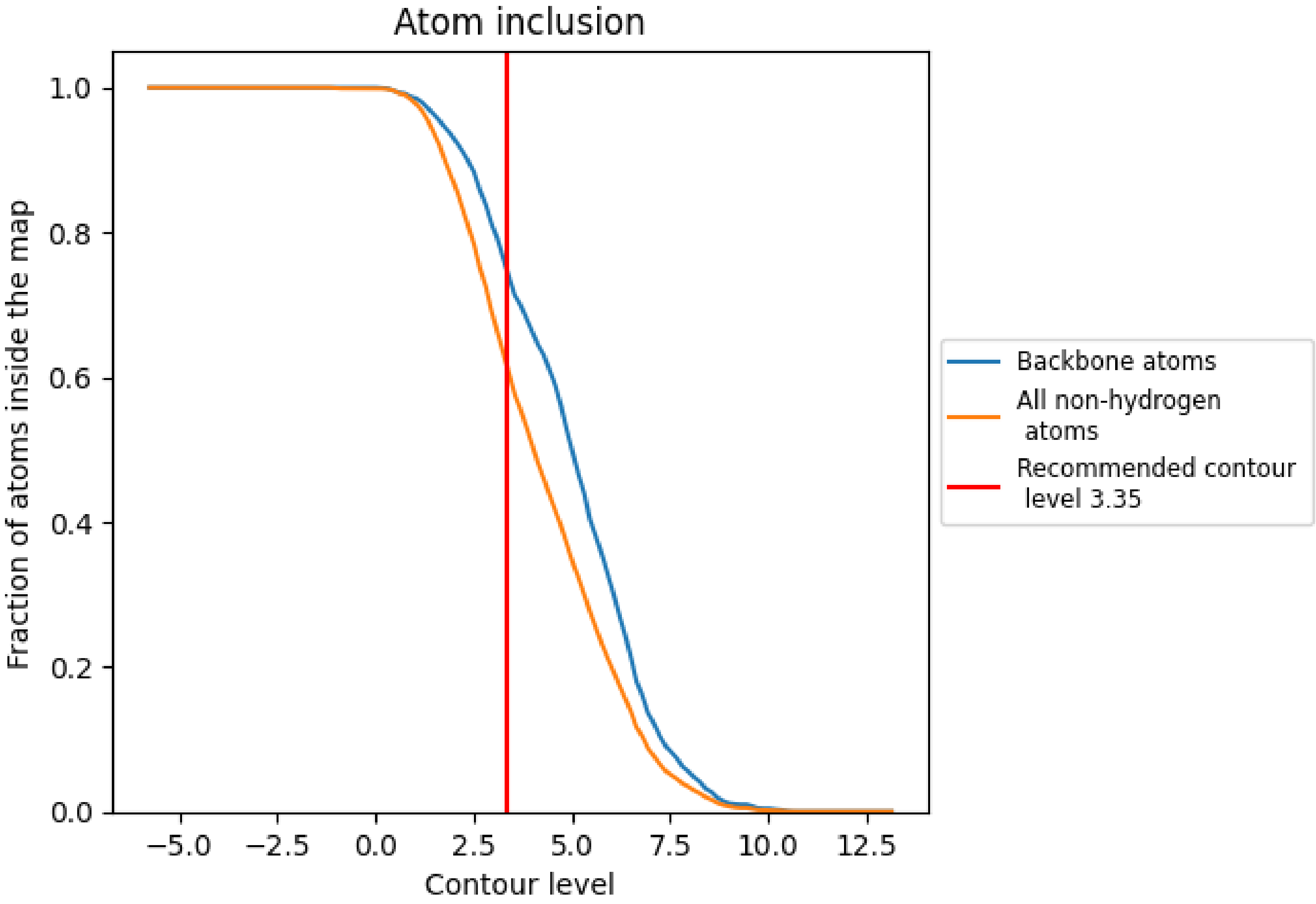
9.3 Atom inclusion mapped to coordinate model ⓘ



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 (3.35).

9.4 Atom inclusion ⓘ



At the recommended contour level, 75% of all backbone atoms, 61% 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 (3.35) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	▬ 0.6143	▬ 0.4540
A	▬ 0.6152	▬ 0.4550
B	▬ 0.6134	▬ 0.4540
C	▬ 0.6152	▬ 0.4550
D	▬ 0.6134	▬ 0.4540
E	▬ 0.6152	▬ 0.4540
F	▬ 0.6134	▬ 0.4540
G	▬ 0.6152	▬ 0.4530
H	▬ 0.6134	▬ 0.4550