Full wwPDB EM Validation Report ⓘ

May 14, 2024 – 09:45 am BST

PDB ID	:	8RHN
EMDB ID	:	EMD-19177
Title	:	Structure of the 55LCC ATPase complex
Authors	:	Foglizzo, M.; Degtjarik, O.; Zeqiraj, E.
Deposited on	:	2023-12-15
Resolution	:	4.50 Å(reported)
Based on initial model	:	.

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.dev92
MolProbity	:	FAILED
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	FAILED
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36.2

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 4.50 Å.

There are no overall percentile quality scores available for this entry.

2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 38368 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 ATPase family gene 2 protein homolog A.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	K	526	Total	C	N	O	S	0	0
			4056	2577	711	751	17		
1	L	545	Total	C	N	O	S	0	0
			4226	2686	741	782	17		
1	M	526	Total	C	N	O	S	0	0
			4056	2578	712	749	17		
1	N	546	Total	C	N	O	S	0	0
			4228	2686	742	783	17		
1	E	182	Total	C	N	O	S	0	0
			1392	886	233	263	10		
1	F	175	Total	C	N	O	S	0	0
			1346	858	225	253	10		
1	G	180	Total	C	N	O	S	0	0
			1379	879	231	259	10		
1	H	177	Total	C	N	O	S	0	0
			1358	866	227	255	10		

There are 216 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	-26	MET	-	initiating methionine	UNP Q8NB90
K	-25	SER	-	expression tag	UNP Q8NB90
K	-24	TYR	-	expression tag	UNP Q8NB90
K	-23	TYR	-	expression tag	UNP Q8NB90
K	-22	HIS	-	expression tag	UNP Q8NB90
K	-21	HIS	-	expression tag	UNP Q8NB90
K	-20	HIS	-	expression tag	UNP Q8NB90
K	-19	HIS	-	expression tag	UNP Q8NB90
K	-18	HIS	-	expression tag	UNP Q8NB90
K	-17	HIS	-	expression tag	UNP Q8NB90
K	-16	ASP	-	expression tag	UNP Q8NB90
K	-15	TYR	-	expression tag	UNP Q8NB90
K	-14	ASP	-	expression tag	UNP Q8NB90
K	-13	ILE	-	expression tag	UNP Q8NB90

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
K	-12	PRO	-	expression tag	UNP Q8NB90
K	-11	THR	-	expression tag	UNP Q8NB90
K	-10	THR	-	expression tag	UNP Q8NB90
K	-9	GLU	-	expression tag	UNP Q8NB90
K	-8	ASN	-	expression tag	UNP Q8NB90
K	-7	LEU	-	expression tag	UNP Q8NB90
K	-6	TYR	-	expression tag	UNP Q8NB90
K	-5	PHE	-	expression tag	UNP Q8NB90
K	-4	GLN	-	expression tag	UNP Q8NB90
K	-3	GLY	-	expression tag	UNP Q8NB90
K	-2	ALA	-	expression tag	UNP Q8NB90
K	-1	MET	-	expression tag	UNP Q8NB90
K	0	GLY	-	expression tag	UNP Q8NB90
L	-26	MET	-	initiating methionine	UNP Q8NB90
L	-25	SER	-	expression tag	UNP Q8NB90
L	-24	TYR	-	expression tag	UNP Q8NB90
L	-23	TYR	-	expression tag	UNP Q8NB90
L	-22	HIS	-	expression tag	UNP Q8NB90
L	-21	HIS	-	expression tag	UNP Q8NB90
L	-20	HIS	-	expression tag	UNP Q8NB90
L	-19	HIS	-	expression tag	UNP Q8NB90
L	-18	HIS	-	expression tag	UNP Q8NB90
L	-17	HIS	-	expression tag	UNP Q8NB90
L	-16	ASP	-	expression tag	UNP Q8NB90
L	-15	TYR	-	expression tag	UNP Q8NB90
L	-14	ASP	-	expression tag	UNP Q8NB90
L	-13	ILE	-	expression tag	UNP Q8NB90
L	-12	PRO	-	expression tag	UNP Q8NB90
L	-11	THR	-	expression tag	UNP Q8NB90
L	-10	THR	-	expression tag	UNP Q8NB90
L	-9	GLU	-	expression tag	UNP Q8NB90
L	-8	ASN	-	expression tag	UNP Q8NB90
L	-7	LEU	-	expression tag	UNP Q8NB90
L	-6	TYR	-	expression tag	UNP Q8NB90
L	-5	PHE	-	expression tag	UNP Q8NB90
L	-4	GLN	-	expression tag	UNP Q8NB90
L	-3	GLY	-	expression tag	UNP Q8NB90
L	-2	ALA	-	expression tag	UNP Q8NB90
L	-1	MET	-	expression tag	UNP Q8NB90
L	0	GLY	-	expression tag	UNP Q8NB90
M	-26	MET	-	initiating methionine	UNP Q8NB90
M	-25	SER	-	expression tag	UNP Q8NB90

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
M	-24	TYR	-	expression tag	UNP Q8NB90
M	-23	TYR	-	expression tag	UNP Q8NB90
M	-22	HIS	-	expression tag	UNP Q8NB90
M	-21	HIS	-	expression tag	UNP Q8NB90
M	-20	HIS	-	expression tag	UNP Q8NB90
M	-19	HIS	-	expression tag	UNP Q8NB90
M	-18	HIS	-	expression tag	UNP Q8NB90
M	-17	HIS	-	expression tag	UNP Q8NB90
M	-16	ASP	-	expression tag	UNP Q8NB90
M	-15	TYR	-	expression tag	UNP Q8NB90
M	-14	ASP	-	expression tag	UNP Q8NB90
M	-13	ILE	-	expression tag	UNP Q8NB90
M	-12	PRO	-	expression tag	UNP Q8NB90
M	-11	THR	-	expression tag	UNP Q8NB90
M	-10	THR	-	expression tag	UNP Q8NB90
M	-9	GLU	-	expression tag	UNP Q8NB90
M	-8	ASN	-	expression tag	UNP Q8NB90
M	-7	LEU	-	expression tag	UNP Q8NB90
M	-6	TYR	-	expression tag	UNP Q8NB90
M	-5	PHE	-	expression tag	UNP Q8NB90
M	-4	GLN	-	expression tag	UNP Q8NB90
M	-3	GLY	-	expression tag	UNP Q8NB90
M	-2	ALA	-	expression tag	UNP Q8NB90
M	-1	MET	-	expression tag	UNP Q8NB90
M	0	GLY	-	expression tag	UNP Q8NB90
N	-26	MET	-	initiating methionine	UNP Q8NB90
N	-25	SER	-	expression tag	UNP Q8NB90
N	-24	TYR	-	expression tag	UNP Q8NB90
N	-23	TYR	-	expression tag	UNP Q8NB90
N	-22	HIS	-	expression tag	UNP Q8NB90
N	-21	HIS	-	expression tag	UNP Q8NB90
N	-20	HIS	-	expression tag	UNP Q8NB90
N	-19	HIS	-	expression tag	UNP Q8NB90
N	-18	HIS	-	expression tag	UNP Q8NB90
N	-17	HIS	-	expression tag	UNP Q8NB90
N	-16	ASP	-	expression tag	UNP Q8NB90
N	-15	TYR	-	expression tag	UNP Q8NB90
N	-14	ASP	-	expression tag	UNP Q8NB90
N	-13	ILE	-	expression tag	UNP Q8NB90
N	-12	PRO	-	expression tag	UNP Q8NB90
N	-11	THR	-	expression tag	UNP Q8NB90
N	-10	THR	-	expression tag	UNP Q8NB90

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
N	-9	GLU	-	expression tag	UNP Q8NB90
N	-8	ASN	-	expression tag	UNP Q8NB90
N	-7	LEU	-	expression tag	UNP Q8NB90
N	-6	TYR	-	expression tag	UNP Q8NB90
N	-5	PHE	-	expression tag	UNP Q8NB90
N	-4	GLN	-	expression tag	UNP Q8NB90
N	-3	GLY	-	expression tag	UNP Q8NB90
N	-2	ALA	-	expression tag	UNP Q8NB90
N	-1	MET	-	expression tag	UNP Q8NB90
N	0	GLY	-	expression tag	UNP Q8NB90
E	-26	MET	-	initiating methionine	UNP Q8NB90
E	-25	SER	-	expression tag	UNP Q8NB90
E	-24	TYR	-	expression tag	UNP Q8NB90
E	-23	TYR	-	expression tag	UNP Q8NB90
E	-22	HIS	-	expression tag	UNP Q8NB90
E	-21	HIS	-	expression tag	UNP Q8NB90
E	-20	HIS	-	expression tag	UNP Q8NB90
E	-19	HIS	-	expression tag	UNP Q8NB90
E	-18	HIS	-	expression tag	UNP Q8NB90
E	-17	HIS	-	expression tag	UNP Q8NB90
E	-16	ASP	-	expression tag	UNP Q8NB90
E	-15	TYR	-	expression tag	UNP Q8NB90
E	-14	ASP	-	expression tag	UNP Q8NB90
E	-13	ILE	-	expression tag	UNP Q8NB90
E	-12	PRO	-	expression tag	UNP Q8NB90
E	-11	THR	-	expression tag	UNP Q8NB90
E	-10	THR	-	expression tag	UNP Q8NB90
E	-9	GLU	-	expression tag	UNP Q8NB90
E	-8	ASN	-	expression tag	UNP Q8NB90
E	-7	LEU	-	expression tag	UNP Q8NB90
E	-6	TYR	-	expression tag	UNP Q8NB90
E	-5	PHE	-	expression tag	UNP Q8NB90
E	-4	GLN	-	expression tag	UNP Q8NB90
E	-3	GLY	-	expression tag	UNP Q8NB90
E	-2	ALA	-	expression tag	UNP Q8NB90
E	-1	MET	-	expression tag	UNP Q8NB90
E	0	GLY	-	expression tag	UNP Q8NB90
F	-26	MET	-	initiating methionine	UNP Q8NB90
F	-25	SER	-	expression tag	UNP Q8NB90
F	-24	TYR	-	expression tag	UNP Q8NB90
F	-23	TYR	-	expression tag	UNP Q8NB90
F	-22	HIS	-	expression tag	UNP Q8NB90

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
F	-21	HIS	-	expression tag	UNP Q8NB90
F	-20	HIS	-	expression tag	UNP Q8NB90
F	-19	HIS	-	expression tag	UNP Q8NB90
F	-18	HIS	-	expression tag	UNP Q8NB90
F	-17	HIS	-	expression tag	UNP Q8NB90
F	-16	ASP	-	expression tag	UNP Q8NB90
F	-15	TYR	-	expression tag	UNP Q8NB90
F	-14	ASP	-	expression tag	UNP Q8NB90
F	-13	ILE	-	expression tag	UNP Q8NB90
F	-12	PRO	-	expression tag	UNP Q8NB90
F	-11	THR	-	expression tag	UNP Q8NB90
F	-10	THR	-	expression tag	UNP Q8NB90
F	-9	GLU	-	expression tag	UNP Q8NB90
F	-8	ASN	-	expression tag	UNP Q8NB90
F	-7	LEU	-	expression tag	UNP Q8NB90
F	-6	TYR	-	expression tag	UNP Q8NB90
F	-5	PHE	-	expression tag	UNP Q8NB90
F	-4	GLN	-	expression tag	UNP Q8NB90
F	-3	GLY	-	expression tag	UNP Q8NB90
F	-2	ALA	-	expression tag	UNP Q8NB90
F	-1	MET	-	expression tag	UNP Q8NB90
F	0	GLY	-	expression tag	UNP Q8NB90
G	-26	MET	-	initiating methionine	UNP Q8NB90
G	-25	SER	-	expression tag	UNP Q8NB90
G	-24	TYR	-	expression tag	UNP Q8NB90
G	-23	TYR	-	expression tag	UNP Q8NB90
G	-22	HIS	-	expression tag	UNP Q8NB90
G	-21	HIS	-	expression tag	UNP Q8NB90
G	-20	HIS	-	expression tag	UNP Q8NB90
G	-19	HIS	-	expression tag	UNP Q8NB90
G	-18	HIS	-	expression tag	UNP Q8NB90
G	-17	HIS	-	expression tag	UNP Q8NB90
G	-16	ASP	-	expression tag	UNP Q8NB90
G	-15	TYR	-	expression tag	UNP Q8NB90
G	-14	ASP	-	expression tag	UNP Q8NB90
G	-13	ILE	-	expression tag	UNP Q8NB90
G	-12	PRO	-	expression tag	UNP Q8NB90
G	-11	THR	-	expression tag	UNP Q8NB90
G	-10	THR	-	expression tag	UNP Q8NB90
G	-9	GLU	-	expression tag	UNP Q8NB90
G	-8	ASN	-	expression tag	UNP Q8NB90
G	-7	LEU	-	expression tag	UNP Q8NB90

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
G	-6	TYR	-	expression tag	UNP Q8NB90
G	-5	PHE	-	expression tag	UNP Q8NB90
G	-4	GLN	-	expression tag	UNP Q8NB90
G	-3	GLY	-	expression tag	UNP Q8NB90
G	-2	ALA	-	expression tag	UNP Q8NB90
G	-1	MET	-	expression tag	UNP Q8NB90
G	0	GLY	-	expression tag	UNP Q8NB90
H	-26	MET	-	initiating methionine	UNP Q8NB90
H	-25	SER	-	expression tag	UNP Q8NB90
H	-24	TYR	-	expression tag	UNP Q8NB90
H	-23	TYR	-	expression tag	UNP Q8NB90
H	-22	HIS	-	expression tag	UNP Q8NB90
H	-21	HIS	-	expression tag	UNP Q8NB90
H	-20	HIS	-	expression tag	UNP Q8NB90
H	-19	HIS	-	expression tag	UNP Q8NB90
H	-18	HIS	-	expression tag	UNP Q8NB90
H	-17	HIS	-	expression tag	UNP Q8NB90
H	-16	ASP	-	expression tag	UNP Q8NB90
H	-15	TYR	-	expression tag	UNP Q8NB90
H	-14	ASP	-	expression tag	UNP Q8NB90
H	-13	ILE	-	expression tag	UNP Q8NB90
H	-12	PRO	-	expression tag	UNP Q8NB90
H	-11	THR	-	expression tag	UNP Q8NB90
H	-10	THR	-	expression tag	UNP Q8NB90
H	-9	GLU	-	expression tag	UNP Q8NB90
H	-8	ASN	-	expression tag	UNP Q8NB90
H	-7	LEU	-	expression tag	UNP Q8NB90
H	-6	TYR	-	expression tag	UNP Q8NB90
H	-5	PHE	-	expression tag	UNP Q8NB90
H	-4	GLN	-	expression tag	UNP Q8NB90
H	-3	GLY	-	expression tag	UNP Q8NB90
H	-2	ALA	-	expression tag	UNP Q8NB90
H	-1	MET	-	expression tag	UNP Q8NB90
H	0	GLY	-	expression tag	UNP Q8NB90

- Molecule 2 is a protein called ATPase family gene 2 protein homolog B.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	O	527	Total	C	N	O	S	0	0
			4016	2541	705	753	17		
2	P	529	Total	C	N	O	S	0	0
			4027	2549	707	753	18		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
2	I	183	Total	C	N	O	S	0	0
			1320	825	259	231	5		
2	J	181	Total	C	N	O	S	0	0
			1306	817	257	227	5		

There are 96 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O	-23	MET	-	initiating methionine	UNP Q9BVQ7
O	-22	ASP	-	expression tag	UNP Q9BVQ7
O	-21	TYR	-	expression tag	UNP Q9BVQ7
O	-20	LYS	-	expression tag	UNP Q9BVQ7
O	-19	ASP	-	expression tag	UNP Q9BVQ7
O	-18	ASP	-	expression tag	UNP Q9BVQ7
O	-17	ASP	-	expression tag	UNP Q9BVQ7
O	-16	ASP	-	expression tag	UNP Q9BVQ7
O	-15	LYS	-	expression tag	UNP Q9BVQ7
O	-14	GLY	-	expression tag	UNP Q9BVQ7
O	-13	GLY	-	expression tag	UNP Q9BVQ7
O	-12	GLY	-	expression tag	UNP Q9BVQ7
O	-11	SER	-	expression tag	UNP Q9BVQ7
O	-10	GLU	-	expression tag	UNP Q9BVQ7
O	-9	ASN	-	expression tag	UNP Q9BVQ7
O	-8	LEU	-	expression tag	UNP Q9BVQ7
O	-7	TYR	-	expression tag	UNP Q9BVQ7
O	-6	PHE	-	expression tag	UNP Q9BVQ7
O	-5	GLN	-	expression tag	UNP Q9BVQ7
O	-4	GLY	-	expression tag	UNP Q9BVQ7
O	-3	ALA	-	expression tag	UNP Q9BVQ7
O	-2	GLY	-	expression tag	UNP Q9BVQ7
O	-1	SER	-	expression tag	UNP Q9BVQ7
O	0	THR	-	expression tag	UNP Q9BVQ7
P	-23	MET	-	initiating methionine	UNP Q9BVQ7
P	-22	ASP	-	expression tag	UNP Q9BVQ7
P	-21	TYR	-	expression tag	UNP Q9BVQ7
P	-20	LYS	-	expression tag	UNP Q9BVQ7
P	-19	ASP	-	expression tag	UNP Q9BVQ7
P	-18	ASP	-	expression tag	UNP Q9BVQ7
P	-17	ASP	-	expression tag	UNP Q9BVQ7
P	-16	ASP	-	expression tag	UNP Q9BVQ7
P	-15	LYS	-	expression tag	UNP Q9BVQ7
P	-14	GLY	-	expression tag	UNP Q9BVQ7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
P	-13	GLY	-	expression tag	UNP Q9BVQ7
P	-12	GLY	-	expression tag	UNP Q9BVQ7
P	-11	SER	-	expression tag	UNP Q9BVQ7
P	-10	GLU	-	expression tag	UNP Q9BVQ7
P	-9	ASN	-	expression tag	UNP Q9BVQ7
P	-8	LEU	-	expression tag	UNP Q9BVQ7
P	-7	TYR	-	expression tag	UNP Q9BVQ7
P	-6	PHE	-	expression tag	UNP Q9BVQ7
P	-5	GLN	-	expression tag	UNP Q9BVQ7
P	-4	GLY	-	expression tag	UNP Q9BVQ7
P	-3	ALA	-	expression tag	UNP Q9BVQ7
P	-2	GLY	-	expression tag	UNP Q9BVQ7
P	-1	SER	-	expression tag	UNP Q9BVQ7
P	0	THR	-	expression tag	UNP Q9BVQ7
I	-23	MET	-	initiating methionine	UNP Q9BVQ7
I	-22	ASP	-	expression tag	UNP Q9BVQ7
I	-21	TYR	-	expression tag	UNP Q9BVQ7
I	-20	LYS	-	expression tag	UNP Q9BVQ7
I	-19	ASP	-	expression tag	UNP Q9BVQ7
I	-18	ASP	-	expression tag	UNP Q9BVQ7
I	-17	ASP	-	expression tag	UNP Q9BVQ7
I	-16	ASP	-	expression tag	UNP Q9BVQ7
I	-15	LYS	-	expression tag	UNP Q9BVQ7
I	-14	GLY	-	expression tag	UNP Q9BVQ7
I	-13	GLY	-	expression tag	UNP Q9BVQ7
I	-12	GLY	-	expression tag	UNP Q9BVQ7
I	-11	SER	-	expression tag	UNP Q9BVQ7
I	-10	GLU	-	expression tag	UNP Q9BVQ7
I	-9	ASN	-	expression tag	UNP Q9BVQ7
I	-8	LEU	-	expression tag	UNP Q9BVQ7
I	-7	TYR	-	expression tag	UNP Q9BVQ7
I	-6	PHE	-	expression tag	UNP Q9BVQ7
I	-5	GLN	-	expression tag	UNP Q9BVQ7
I	-4	GLY	-	expression tag	UNP Q9BVQ7
I	-3	ALA	-	expression tag	UNP Q9BVQ7
I	-2	GLY	-	expression tag	UNP Q9BVQ7
I	-1	SER	-	expression tag	UNP Q9BVQ7
I	0	THR	-	expression tag	UNP Q9BVQ7
J	-23	MET	-	initiating methionine	UNP Q9BVQ7
J	-22	ASP	-	expression tag	UNP Q9BVQ7
J	-21	TYR	-	expression tag	UNP Q9BVQ7
J	-20	LYS	-	expression tag	UNP Q9BVQ7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
J	-19	ASP	-	expression tag	UNP Q9BVQ7
J	-18	ASP	-	expression tag	UNP Q9BVQ7
J	-17	ASP	-	expression tag	UNP Q9BVQ7
J	-16	ASP	-	expression tag	UNP Q9BVQ7
J	-15	LYS	-	expression tag	UNP Q9BVQ7
J	-14	GLY	-	expression tag	UNP Q9BVQ7
J	-13	GLY	-	expression tag	UNP Q9BVQ7
J	-12	GLY	-	expression tag	UNP Q9BVQ7
J	-11	SER	-	expression tag	UNP Q9BVQ7
J	-10	GLU	-	expression tag	UNP Q9BVQ7
J	-9	ASN	-	expression tag	UNP Q9BVQ7
J	-8	LEU	-	expression tag	UNP Q9BVQ7
J	-7	TYR	-	expression tag	UNP Q9BVQ7
J	-6	PHE	-	expression tag	UNP Q9BVQ7
J	-5	GLN	-	expression tag	UNP Q9BVQ7
J	-4	GLY	-	expression tag	UNP Q9BVQ7
J	-3	ALA	-	expression tag	UNP Q9BVQ7
J	-2	GLY	-	expression tag	UNP Q9BVQ7
J	-1	SER	-	expression tag	UNP Q9BVQ7
J	0	THR	-	expression tag	UNP Q9BVQ7

- Molecule 3 is a protein called cDNA FLJ55172.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	A	198	Total	C	N	O	S	0	0
			1604	1022	284	294	4		
3	B	196	Total	C	N	O	S	0	0
			1585	1012	279	290	4		

There are 122 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-60	MET	-	initiating methionine	UNP B4DRQ5
A	-59	SER	-	expression tag	UNP B4DRQ5
A	-58	ALA	-	expression tag	UNP B4DRQ5
A	-57	TRP	-	expression tag	UNP B4DRQ5
A	-56	SER	-	expression tag	UNP B4DRQ5
A	-55	HIS	-	expression tag	UNP B4DRQ5
A	-54	PRO	-	expression tag	UNP B4DRQ5
A	-53	GLN	-	expression tag	UNP B4DRQ5
A	-52	PHE	-	expression tag	UNP B4DRQ5
A	-51	GLU	-	expression tag	UNP B4DRQ5

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	-50	LYS	-	expression tag	UNP B4DRQ5
A	-49	GLY	-	expression tag	UNP B4DRQ5
A	-48	GLY	-	expression tag	UNP B4DRQ5
A	-47	GLY	-	expression tag	UNP B4DRQ5
A	-46	SER	-	expression tag	UNP B4DRQ5
A	-45	GLY	-	expression tag	UNP B4DRQ5
A	-44	GLY	-	expression tag	UNP B4DRQ5
A	-43	GLY	-	expression tag	UNP B4DRQ5
A	-42	SER	-	expression tag	UNP B4DRQ5
A	-41	GLY	-	expression tag	UNP B4DRQ5
A	-40	GLY	-	expression tag	UNP B4DRQ5
A	-39	SER	-	expression tag	UNP B4DRQ5
A	-38	ALA	-	expression tag	UNP B4DRQ5
A	-37	TRP	-	expression tag	UNP B4DRQ5
A	-36	SER	-	expression tag	UNP B4DRQ5
A	-35	HIS	-	expression tag	UNP B4DRQ5
A	-34	PRO	-	expression tag	UNP B4DRQ5
A	-33	GLN	-	expression tag	UNP B4DRQ5
A	-32	PHE	-	expression tag	UNP B4DRQ5
A	-31	GLU	-	expression tag	UNP B4DRQ5
A	-30	LYS	-	expression tag	UNP B4DRQ5
A	-29	GLY	-	expression tag	UNP B4DRQ5
A	-28	ALA	-	expression tag	UNP B4DRQ5
A	-27	GLY	-	expression tag	UNP B4DRQ5
A	-26	SER	-	expression tag	UNP B4DRQ5
A	-25	GLU	-	expression tag	UNP B4DRQ5
A	-24	ASN	-	expression tag	UNP B4DRQ5
A	-23	LEU	-	expression tag	UNP B4DRQ5
A	-22	TYR	-	expression tag	UNP B4DRQ5
A	-21	PHE	-	expression tag	UNP B4DRQ5
A	-20	GLN	-	expression tag	UNP B4DRQ5
A	-19	GLY	-	expression tag	UNP B4DRQ5
A	-18	ALA	-	expression tag	UNP B4DRQ5
A	-17	GLY	-	expression tag	UNP B4DRQ5
A	-16	SER	-	expression tag	UNP B4DRQ5
A	-15	ASP	-	expression tag	UNP B4DRQ5
A	-14	SER	-	expression tag	UNP B4DRQ5
A	-13	LEU	-	expression tag	UNP B4DRQ5
A	-12	GLU	-	expression tag	UNP B4DRQ5
A	-11	PHE	-	expression tag	UNP B4DRQ5
A	-10	ILE	-	expression tag	UNP B4DRQ5
A	-9	ALA	-	expression tag	UNP B4DRQ5

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	-8	SER	-	expression tag	UNP B4DRQ5
A	-7	LYS	-	expression tag	UNP B4DRQ5
A	-6	LEU	-	expression tag	UNP B4DRQ5
A	-5	ALA	-	expression tag	UNP B4DRQ5
A	-4	GLY	-	expression tag	UNP B4DRQ5
A	-3	GLY	-	expression tag	UNP B4DRQ5
A	-2	GLY	-	expression tag	UNP B4DRQ5
A	-1	SER	-	expression tag	UNP B4DRQ5
A	0	THR	-	expression tag	UNP B4DRQ5
B	-60	MET	-	initiating methionine	UNP B4DRQ5
B	-59	SER	-	expression tag	UNP B4DRQ5
B	-58	ALA	-	expression tag	UNP B4DRQ5
B	-57	TRP	-	expression tag	UNP B4DRQ5
B	-56	SER	-	expression tag	UNP B4DRQ5
B	-55	HIS	-	expression tag	UNP B4DRQ5
B	-54	PRO	-	expression tag	UNP B4DRQ5
B	-53	GLN	-	expression tag	UNP B4DRQ5
B	-52	PHE	-	expression tag	UNP B4DRQ5
B	-51	GLU	-	expression tag	UNP B4DRQ5
B	-50	LYS	-	expression tag	UNP B4DRQ5
B	-49	GLY	-	expression tag	UNP B4DRQ5
B	-48	GLY	-	expression tag	UNP B4DRQ5
B	-47	GLY	-	expression tag	UNP B4DRQ5
B	-46	SER	-	expression tag	UNP B4DRQ5
B	-45	GLY	-	expression tag	UNP B4DRQ5
B	-44	GLY	-	expression tag	UNP B4DRQ5
B	-43	GLY	-	expression tag	UNP B4DRQ5
B	-42	SER	-	expression tag	UNP B4DRQ5
B	-41	GLY	-	expression tag	UNP B4DRQ5
B	-40	GLY	-	expression tag	UNP B4DRQ5
B	-39	SER	-	expression tag	UNP B4DRQ5
B	-38	ALA	-	expression tag	UNP B4DRQ5
B	-37	TRP	-	expression tag	UNP B4DRQ5
B	-36	SER	-	expression tag	UNP B4DRQ5
B	-35	HIS	-	expression tag	UNP B4DRQ5
B	-34	PRO	-	expression tag	UNP B4DRQ5
B	-33	GLN	-	expression tag	UNP B4DRQ5
B	-32	PHE	-	expression tag	UNP B4DRQ5
B	-31	GLU	-	expression tag	UNP B4DRQ5
B	-30	LYS	-	expression tag	UNP B4DRQ5
B	-29	GLY	-	expression tag	UNP B4DRQ5
B	-28	ALA	-	expression tag	UNP B4DRQ5

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	-27	GLY	-	expression tag	UNP B4DRQ5
B	-26	SER	-	expression tag	UNP B4DRQ5
B	-25	GLU	-	expression tag	UNP B4DRQ5
B	-24	ASN	-	expression tag	UNP B4DRQ5
B	-23	LEU	-	expression tag	UNP B4DRQ5
B	-22	TYR	-	expression tag	UNP B4DRQ5
B	-21	PHE	-	expression tag	UNP B4DRQ5
B	-20	GLN	-	expression tag	UNP B4DRQ5
B	-19	GLY	-	expression tag	UNP B4DRQ5
B	-18	ALA	-	expression tag	UNP B4DRQ5
B	-17	GLY	-	expression tag	UNP B4DRQ5
B	-16	SER	-	expression tag	UNP B4DRQ5
B	-15	ASP	-	expression tag	UNP B4DRQ5
B	-14	SER	-	expression tag	UNP B4DRQ5
B	-13	LEU	-	expression tag	UNP B4DRQ5
B	-12	GLU	-	expression tag	UNP B4DRQ5
B	-11	PHE	-	expression tag	UNP B4DRQ5
B	-10	ILE	-	expression tag	UNP B4DRQ5
B	-9	ALA	-	expression tag	UNP B4DRQ5
B	-8	SER	-	expression tag	UNP B4DRQ5
B	-7	LYS	-	expression tag	UNP B4DRQ5
B	-6	LEU	-	expression tag	UNP B4DRQ5
B	-5	ALA	-	expression tag	UNP B4DRQ5
B	-4	GLY	-	expression tag	UNP B4DRQ5
B	-3	GLY	-	expression tag	UNP B4DRQ5
B	-2	GLY	-	expression tag	UNP B4DRQ5
B	-1	SER	-	expression tag	UNP B4DRQ5
B	0	THR	-	expression tag	UNP B4DRQ5

- Molecule 4 is a protein called Cyclin-dependent kinase 2-interacting protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	C	150	Total	C	N	O	S	0	0
			1211	769	202	234	6		
4	D	155	Total	C	N	O	S	0	0
			1258	802	209	241	6		

There are 50 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	-24	MET	-	initiating methionine	UNP Q9BW66
C	-23	SER	-	expression tag	UNP Q9BW66

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
C	-22	TYR	-	expression tag	UNP Q9BW66
C	-21	TYR	-	expression tag	UNP Q9BW66
C	-20	HIS	-	expression tag	UNP Q9BW66
C	-19	HIS	-	expression tag	UNP Q9BW66
C	-18	HIS	-	expression tag	UNP Q9BW66
C	-17	HIS	-	expression tag	UNP Q9BW66
C	-16	HIS	-	expression tag	UNP Q9BW66
C	-15	HIS	-	expression tag	UNP Q9BW66
C	-14	ASP	-	expression tag	UNP Q9BW66
C	-13	TYR	-	expression tag	UNP Q9BW66
C	-12	ASP	-	expression tag	UNP Q9BW66
C	-11	ILE	-	expression tag	UNP Q9BW66
C	-10	PRO	-	expression tag	UNP Q9BW66
C	-9	THR	-	expression tag	UNP Q9BW66
C	-8	THR	-	expression tag	UNP Q9BW66
C	-7	GLU	-	expression tag	UNP Q9BW66
C	-6	ASN	-	expression tag	UNP Q9BW66
C	-5	LEU	-	expression tag	UNP Q9BW66
C	-4	TYR	-	expression tag	UNP Q9BW66
C	-3	PHE	-	expression tag	UNP Q9BW66
C	-2	GLN	-	expression tag	UNP Q9BW66
C	-1	GLY	-	expression tag	UNP Q9BW66
C	0	ALA	-	expression tag	UNP Q9BW66
D	-24	MET	-	initiating methionine	UNP Q9BW66
D	-23	SER	-	expression tag	UNP Q9BW66
D	-22	TYR	-	expression tag	UNP Q9BW66
D	-21	TYR	-	expression tag	UNP Q9BW66
D	-20	HIS	-	expression tag	UNP Q9BW66
D	-19	HIS	-	expression tag	UNP Q9BW66
D	-18	HIS	-	expression tag	UNP Q9BW66
D	-17	HIS	-	expression tag	UNP Q9BW66
D	-16	HIS	-	expression tag	UNP Q9BW66
D	-15	HIS	-	expression tag	UNP Q9BW66
D	-14	ASP	-	expression tag	UNP Q9BW66
D	-13	TYR	-	expression tag	UNP Q9BW66
D	-12	ASP	-	expression tag	UNP Q9BW66
D	-11	ILE	-	expression tag	UNP Q9BW66
D	-10	PRO	-	expression tag	UNP Q9BW66
D	-9	THR	-	expression tag	UNP Q9BW66
D	-8	THR	-	expression tag	UNP Q9BW66
D	-7	GLU	-	expression tag	UNP Q9BW66
D	-6	ASN	-	expression tag	UNP Q9BW66

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
D	-5	LEU	-	expression tag	UNP Q9BW66
D	-4	TYR	-	expression tag	UNP Q9BW66
D	-3	PHE	-	expression tag	UNP Q9BW66
D	-2	GLN	-	expression tag	UNP Q9BW66
D	-1	GLY	-	expression tag	UNP Q9BW66
D	0	ALA	-	expression tag	UNP Q9BW66

SEQUENCE-PLOTS INFOmissingINFO

3 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	165778	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 ($e^-/Å^2$)	37.6	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	3100	Depositor
Magnification	165000	Depositor
Image detector	TFS FALCON 4i (4k x 4k)	Depositor

4 Model quality

4.1 Standard geometry

MolProbity failed to run properly - this section is therefore empty.

4.2 Too-close contacts

MolProbity failed to run properly - this section is therefore empty.

4.3 Torsion angles

4.3.1 Protein backbone

MolProbity failed to run properly - this section is therefore empty.

4.3.2 Protein sidechains

MolProbity failed to run properly - this section is therefore empty.

4.3.3 RNA

MolProbity failed to run properly - this section is therefore empty.

4.4 Non-standard residues in protein, DNA, RNA chains

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

4.5 Carbohydrates

There are no monosaccharides in this entry.

4.6 Ligand geometry

There are no ligands in this entry.

4.7 Other polymers

There are no such residues in this entry.

4.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

5 Map visualisation

This section contains visualisations of the EMDB entry EMD-19177. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

5.1 Orthogonal projections

This section was not generated.

5.2 Central slices

This section was not generated.

5.3 Largest variance slices

This section was not generated.

5.4 Orthogonal standard-deviation projections (False-color)

This section was not generated.

5.5 Orthogonal surface views

This section was not generated.

5.6 Mask visualisation

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

6 Map analysis

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

6.1 Map-value distribution

This section was not generated.

6.2 Volume estimate versus contour level

This section was not generated.

6.3 Rotationally averaged power spectrum

This section was not generated. The rotationally averaged power spectrum had issues being displayed.

7 Fourier-Shell correlation (i)

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

8 Map-model fit

This section was not generated.