



Full wwPDB EM Validation Report ⓘ

Apr 15, 2026 – 01:41 PM UTC

PDB ID : 7ART / pdb_00007art
EMDB ID : EMD-11387
Title : 48 helix bundle DNA origami brick
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Deposited on : 2020-10-26
Resolution : 10.00 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.dev132
MolProbity : **FAILED**
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

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 10.00 Å.

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

MolProbity failed to run properly - the sequence quality summary graphics cannot be shown.

2 Entry composition

There are 212 unique types of molecules in this entry. The entry contains 349108 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 DNA chain called SCAFFOLD STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	8064	Total	C	N	O	P	0	0
			164972	78873	29001	49035	8063		

- Molecule 2 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AB	40	Total	C	N	O	P	0	0
			813	394	134	246	39		

- Molecule 3 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	AC	44	Total	C	N	O	P	0	0
			887	432	132	280	43		

- Molecule 4 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	AD	50	Total	C	N	O	P	0	0
			1032	495	183	305	49		

- Molecule 5 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	AE	47	Total	C	N	O	P	0	0
			952	456	174	276	46		

- Molecule 6 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	AF	49	Total	C	N	O	P	0	0
			1008	481	191	288	48		

- Molecule 7 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AG	49	Total	C	N	O	P	0	0
			997	477	186	286	48		

- Molecule 8 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AH	49	Total	C	N	O	P	0	0
			1013	481	197	287	48		

- Molecule 9 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AI	49	Total	C	N	O	P	0	0
			1005	479	187	291	48		

- Molecule 10 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	42	Total	C	N	O	P	0	0
			860	412	158	249	41		

- Molecule 11 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	54	Total	C	N	O	P	0	0
			1110	527	214	316	53		

- Molecule 12 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	38	Total	C	N	O	P	0	0
			768	376	110	245	37		

- Molecule 13 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AM	44	Total	C	N	O	P	0	0
			893	437	133	280	43		

- Molecule 14 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AN	35	Total	C	N	O	P	0	0
			713	342	132	205	34		

- Molecule 15 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AO	40	Total	C	N	O	P	0	0
			806	391	128	248	39		

- Molecule 16 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AP	42	Total	C	N	O	P	0	0
			852	411	147	253	41		

- Molecule 17 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AQ	35	Total	C	N	O	P	0	0
			727	346	140	207	34		

- Molecule 18 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AR	49	Total	C	N	O	P	0	0
			1015	480	210	277	48		

- Molecule 19 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	AS	42	Total	C	N	O	P	0	0
			847	408	147	251	41		

- Molecule 20 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AT	38	Total	C	N	O	P	0	0
			772	378	120	237	37		

- Molecule 21 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AU	47	Total	C	N	O	P	0	0
			967	462	195	264	46		

- Molecule 22 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AV	37	Total	C	N	O	P	0	0
			752	359	139	218	36		

- Molecule 23 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AW	54	Total	C	N	O	P	0	0
			1114	534	216	311	53		

- Molecule 24 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AX	36	Total	C	N	O	P	0	0
			731	353	121	222	35		

- Molecule 25 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	AY	36	Total	C	N	O	P	0	0
			735	356	121	223	35		

- Molecule 26 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AZ	44	Total	C	N	O	P	0	0
			886	422	169	252	43		

- Molecule 27 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	Aa	38	Total	C	N	O	P	0	0
			775	379	119	240	37		

- Molecule 28 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	Ab	42	Total	C	N	O	P	0	0
			872	415	179	237	41		

- Molecule 29 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	Ac	49	Total	C	N	O	P	0	0
			1006	485	175	298	48		

- Molecule 30 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	Ad	42	Total	C	N	O	P	0	0
			871	414	165	251	41		

- Molecule 31 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	Ae	42	Total	C	N	O	P	0	0
			860	412	173	234	41		

- Molecule 32 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	Af	35	Total	C	N	O	P	0	0
			724	345	135	210	34		

- Molecule 33 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	Ag	40	Total	C	N	O	P	0	0
			813	394	137	243	39		

- Molecule 34 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	Ah	42	Total	C	N	O	P	0	0
			866	414	168	243	41		

- Molecule 35 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	Ai	42	Total	C	N	O	P	0	0
			861	413	148	259	41		

- Molecule 36 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	Aj	42	Total	C	N	O	P	0	0
			845	407	145	252	41		

- Molecule 37 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	Ak	42	Total	C	N	O	P	0	0
			859	412	161	245	41		

- Molecule 38 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Al	42	Total	C	N	O	P	0	0
			855	409	158	247	41		

- Molecule 39 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Am	44	Total	C	N	O	P	0	0
			892	438	126	285	43		

- Molecule 40 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	An	38	Total	C	N	O	P	0	0
			766	376	110	243	37		

- Molecule 41 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Ao	49	Total	C	N	O	P	0	0
			1000	479	196	277	48		

- Molecule 42 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Ap	49	Total	C	N	O	P	0	0
			1008	479	208	273	48		

- Molecule 43 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Aq	47	Total	C	N	O	P	0	0
			950	452	181	271	46		

- Molecule 44 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Ar	42	Total	C	N	O	P	0	0
			850	409	152	248	41		

- Molecule 45 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	As	42	Total	C	N	O	P	0	0
			859	412	164	242	41		

- Molecule 46 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	At	51	Total	C	N	O	P	0	0
			1051	499	197	305	50		

- Molecule 47 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Au	49	Total	C	N	O	P	0	0
			1004	477	192	287	48		

- Molecule 48 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Av	37	Total	C	N	O	P	0	0
			760	360	150	214	36		

- Molecule 49 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Aw	42	Total	C	N	O	P	0	0
			869	411	174	243	41		

- Molecule 50 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	Ax	44	Total	C	N	O	P	0	0
			882	430	128	281	43		

- Molecule 51 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	Ay	40	Total	C	N	O	P	0	0
			808	392	127	250	39		

- Molecule 52 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	Az	36	Total	C	N	O	P	0	0
			722	353	106	228	35		

- Molecule 53 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	A0	63	Total	C	N	O	P	0	0
			1285	615	234	374	62		

- Molecule 54 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	A1	49	Total	C	N	O	P	0	0
			995	477	180	290	48		

- Molecule 55 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	A2	42	Total	C	N	O	P	0	0
			864	414	165	244	41		

- Molecule 56 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	A3	40	Total	C	N	O	P	0	0
			815	393	141	242	39		

- Molecule 57 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	A4	44	Total	C	N	O	P	0	0
			890	434	136	277	43		

- Molecule 58 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	A5	50	Total	C	N	O	P	0	0
			1024	492	186	297	49		

- Molecule 59 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	A6	49	Total	C	N	O	P	0	0
			1011	484	194	285	48		

- Molecule 60 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	A7	42	Total	C	N	O	P	0	0
			850	407	157	245	41		

- Molecule 61 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	A8	50	Total	C	N	O	P	0	0
			1015	489	177	300	49		

- Molecule 62 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	A9	49	Total	C	N	O	P	0	0
			994	479	172	295	48		

- Molecule 63 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	BA	49	Total	C	N	O	P	0	0
			1004	476	208	272	48		

- Molecule 64 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	BB	49	Total	C	N	O	P	0	0
			1010	482	196	284	48		

- Molecule 65 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	BC	49	Total	C	N	O	P	0	0
			998	476	190	284	48		

- Molecule 66 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	BD	38	Total	C	N	O	P	0	0
			771	379	116	239	37		

- Molecule 67 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	BE	44	Total	C	N	O	P	0	0
			895	437	139	276	43		

- Molecule 68 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	BF	42	Total	C	N	O	P	0	0
			863	414	168	240	41		

- Molecule 69 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	BG	42	Total	C	N	O	P	0	0
			871	412	185	233	41		

- Molecule 70 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	BH	40	Total	C	N	O	P	0	0
			814	396	138	241	39		

- Molecule 71 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	BI	42	Total	C	N	O	P	0	0
			874	417	171	245	41		

- Molecule 72 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	BJ	38	Total	C	N	O	P	0	0
			761	376	95	253	37		

- Molecule 73 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	BK	33	Total	C	N	O	P	0	0
			673	320	127	194	32		

- Molecule 74 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	BL	43	Total	C	N	O	P	0	0
			869	424	140	263	42		

- Molecule 75 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	BM	43	Total	C	N	O	P	0	0
			878	425	142	269	42		

- Molecule 76 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	BN	51	Total	C	N	O	P	0	0
			1048	504	195	299	50		

- Molecule 77 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	BO	35	Total	C	N	O	P	0	0
			714	345	126	209	34		

- Molecule 78 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	BP	40	Total	C	N	O	P	0	0
			815	391	158	227	39		

- Molecule 79 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	BQ	37	Total	C	N	O	P	0	0
			759	362	148	213	36		

- Molecule 80 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	BR	38	Total	C	N	O	P	0	0
			772	377	115	243	37		

- Molecule 81 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	BS	47	Total	C	N	O	P	0	0
			960	463	164	287	46		

- Molecule 82 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	BT	37	Total	C	N	O	P	0	0
			767	364	158	209	36		

- Molecule 83 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	BU	40	Total	C	N	O	P	0	0
			807	393	129	246	39		

- Molecule 84 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	BV	42	Total	C	N	O	P	0	0
			861	410	175	235	41		

- Molecule 85 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	BW	35	Total	C	N	O	P	0	0
			711	342	135	200	34		

- Molecule 86 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	BX	42	Total	C	N	O	P	0	0
			858	412	161	244	41		

- Molecule 87 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
87	BY	35	Total	C	N	O	P	0	0
			713	344	130	205	34		

- Molecule 88 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
88	BZ	42	Total	C	N	O	P	0	0
			859	409	170	239	41		

- Molecule 89 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
89	Ba	49	Total	C	N	O	P	0	0
			1002	475	194	285	48		

- Molecule 90 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
90	Bb	44	Total	C	N	O	P	0	0
			879	432	120	284	43		

- Molecule 91 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
91	Bc	38	Total	C	N	O	P	0	0
			768	377	112	242	37		

- Molecule 92 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
92	Bd	42	Total	C	N	O	P	0	0
			853	412	155	245	41		

- Molecule 93 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
93	Be	49	Total	C	N	O	P	0	0
			993	476	184	285	48		

- Molecule 94 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
94	Bf	42	Total	C	N	O	P	0	0
			867	410	169	247	41		

- Molecule 95 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
95	Bg	49	Total	C	N	O	P	0	0
			1007	482	190	287	48		

- Molecule 96 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
96	Bh	51	Total	C	N	O	P	0	0
			1044	501	195	298	50		

- Molecule 97 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
97	Bi	35	Total	C	N	O	P	0	0
			713	342	129	208	34		

- Molecule 98 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
98	Bj	37	Total	C	N	O	P	0	0
			754	361	140	217	36		

- Molecule 99 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
99	Bk	42	Total	C	N	O	P	0	0
			850	408	153	248	41		

- Molecule 100 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
100	Bl	44	Total	C	N	O	P	0	0
			884	434	121	286	43		

- Molecule 101 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
101	Bm	40	Total	C	N	O	P	0	0
			811	397	128	247	39		

- Molecule 102 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
102	Bn	63	Total	C	N	O	P	0	0
			1291	613	248	368	62		

- Molecule 103 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
103	Bo	35	Total	C	N	O	P	0	0
			725	345	144	202	34		

- Molecule 104 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
104	Bp	42	Total	C	N	O	P	0	0
			860	413	160	246	41		

- Molecule 105 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
105	Bq	42	Total	C	N	O	P	0	0
			862	413	160	248	41		

- Molecule 106 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
106	Br	49	Total	C	N	O	P	0	0
			1006	483	180	295	48		

- Molecule 107 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
107	Bs	35	Total	C	N	O	P	0	0
			716	344	136	202	34		

- Molecule 108 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
108	Bt	35	Total	C	N	O	P	0	0
			716	344	127	211	34		

- Molecule 109 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
109	Bu	40	Total	C	N	O	P	0	0
			819	397	143	240	39		

- Molecule 110 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
110	Bv	44	Total	C	N	O	P	0	0
			888	434	130	281	43		

- Molecule 111 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
111	Bw	49	Total	C	N	O	P	0	0
			1012	484	194	286	48		

- Molecule 112 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
112	Bx	47	Total	C	N	O	P	0	0
			962	461	178	277	46		

- Molecule 113 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
113	By	40	Total	C	N	O	P	0	0
			810	389	142	240	39		

- Molecule 114 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
114	Bz	49	Total	C	N	O	P	0	0
			1017	487	194	288	48		

- Molecule 115 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
115	B0	43	Total	C	N	O	P	0	0
			871	423	144	262	42		

- Molecule 116 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
116	B1	49	Total	C	N	O	P	0	0
			1017	480	201	288	48		

- Molecule 117 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
117	B2	38	Total	C	N	O	P	0	0
			769	376	113	243	37		

- Molecule 118 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
118	B3	44	Total	C	N	O	P	0	0
			890	438	129	280	43		

- Molecule 119 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
119	B4	35	Total	C	N	O	P	0	0
			704	342	114	214	34		

- Molecule 120 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
120	B5	35	Total	C	N	O	P	0	0
			712	344	124	210	34		

- Molecule 121 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
121	B6	49	Total	C	N	O	P	0	0
			997	477	183	289	48		

- Molecule 122 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
122	B7	49	Total	C	N	O	P	0	0
			1011	484	194	285	48		

- Molecule 123 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
123	B8	42	Total	C	N	O	P	0	0
			864	409	170	244	41		

- Molecule 124 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
124	B9	36	Total	C	N	O	P	0	0
			729	357	111	226	35		

- Molecule 125 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
125	CA	35	Total	C	N	O	P	0	0
			716	342	132	208	34		

- Molecule 126 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
126	CB	35	Total	C	N	O	P	0	0
			710	343	125	208	34		

- Molecule 127 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
127	CC	49	Total	C	N	O	P	0	0
			1008	482	190	288	48		

- Molecule 128 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
128	CD	42	Total	C	N	O	P	0	0
			843	408	144	250	41		

- Molecule 129 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
129	CE	35	Total	C	N	O	P	0	0
			729	346	149	200	34		

- Molecule 130 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
130	CF	38	Total	C	N	O	P	0	0
			764	377	103	247	37		

- Molecule 131 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
131	CG	51	Total	C	N	O	P	0	0
			1047	504	189	304	50		

- Molecule 132 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
132	CH	50	Total	C	N	O	P	0	0
			1020	493	176	302	49		

- Molecule 133 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
133	CI	43	Total	C	N	O	P	0	0
			862	422	124	274	42		

- Molecule 134 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
134	CJ	40	Total	C	N	O	P	0	0
			806	387	144	236	39		

- Molecule 135 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
135	CK	37	Total	C	N	O	P	0	0
			766	364	158	208	36		

- Molecule 136 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
136	CL	47	Total	C	N	O	P	0	0
			962	463	179	274	46		

- Molecule 137 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
137	CM	38	Total	C	N	O	P	0	0
			769	376	113	243	37		

- Molecule 138 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
138	CN	40	Total	C	N	O	P	0	0
			826	393	165	229	39		

- Molecule 139 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
139	CO	42	Total	C	N	O	P	0	0
			857	409	164	243	41		

- Molecule 140 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
140	CP	35	Total	C	N	O	P	0	0
			714	342	132	206	34		

- Molecule 141 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
141	CQ	40	Total	C	N	O	P	0	0
			821	396	138	248	39		

- Molecule 142 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
142	CR	35	Total	C	N	O	P	0	0
			715	338	136	207	34		

- Molecule 143 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
143	CS	49	Total	C	N	O	P	0	0
			1016	480	213	275	48		

- Molecule 144 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
144	CT	42	Total	C	N	O	P	0	0
			873	415	170	247	41		

- Molecule 145 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
145	CU	44	Total	C	N	O	P	0	0
			879	433	122	281	43		

- Molecule 146 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
146	CV	38	Total	C	N	O	P	0	0
			767	375	111	244	37		

- Molecule 147 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
147	CW	42	Total	C	N	O	P	0	0
			858	408	162	247	41		

- Molecule 148 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
148	CX	42	Total	C	N	O	P	0	0
			867	413	169	244	41		

- Molecule 149 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
149	CY	49	Total	C	N	O	P	0	0
			1006	484	185	289	48		

- Molecule 150 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
150	CZ	49	Total	C	N	O	P	0	0
			1000	476	184	292	48		

- Molecule 151 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
151	Ca	42	Total	C	N	O	P	0	0
			866	414	162	249	41		

- Molecule 152 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
152	Cb	49	Total	C	N	O	P	0	0
			1008	478	194	288	48		

- Molecule 153 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
153	Cc	42	Total	C	N	O	P	0	0
			855	411	162	241	41		

- Molecule 154 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
154	Cd	47	Total	C	N	O	P	0	0
			963	464	178	275	46		

- Molecule 155 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
155	Ce	44	Total	C	N	O	P	0	0
			892	437	136	276	43		

- Molecule 156 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
156	Cf	40	Total	C	N	O	P	0	0
			825	394	143	249	39		

- Molecule 157 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
157	Cg	36	Total	C	N	O	P	0	0
			731	353	121	222	35		

- Molecule 158 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
158	Ch	42	Total	C	N	O	P	0	0
			853	407	154	251	41		

- Molecule 159 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
159	Ci	56	Total	C	N	O	P	0	0
			1145	553	203	334	55		

- Molecule 160 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
160	Cj	35	Total	C	N	O	P	0	0
			713	339	135	205	34		

- Molecule 161 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
161	Ck	36	Total	C	N	O	P	0	0
			724	351	114	224	35		

- Molecule 162 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
162	Cl	40	Total	C	N	O	P	0	0
			829	396	156	238	39		

- Molecule 163 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
163	Cm	44	Total	C	N	O	P	0	0
			897	436	137	281	43		

- Molecule 164 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
164	Cn	42	Total	C	N	O	P	0	0
			850	405	150	254	41		

- Molecule 165 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
165	Co	35	Total	C	N	O	P	0	0
			708	340	122	212	34		

- Molecule 166 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
166	Cp	49	Total	C	N	O	P	0	0
			1005	478	185	294	48		

- Molecule 167 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
167	Cq	44	Total	C	N	O	P	0	0
			889	425	157	264	43		

- Molecule 168 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
168	Cr	49	Total	C	N	O	P	0	0
			1009	477	195	289	48		

- Molecule 169 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
169	Cs	44	Total	C	N	O	P	0	0
			902	428	178	253	43		

- Molecule 170 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
170	Ct	42	Total	C	N	O	P	0	0
			861	410	160	250	41		

- Molecule 171 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
171	Cu	38	Total	C	N	O	P	0	0
			769	377	109	246	37		

- Molecule 172 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
172	Cv	44	Total	C	N	O	P	0	0
			881	434	115	289	43		

- Molecule 173 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
173	Cw	35	Total	C	N	O	P	0	0
			705	340	119	212	34		

- Molecule 174 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
174	Cx	35	Total	C	N	O	P	0	0
			727	343	143	207	34		

- Molecule 175 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
175	Cy	42	Total	C	N	O	P	0	0
			865	412	164	248	41		

- Molecule 176 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
176	Cz	49	Total	C	N	O	P	0	0
			1004	475	191	290	48		

- Molecule 177 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
177	C0	40	Total	C	N	O	P	0	0
			820	395	136	250	39		

- Molecule 178 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
178	C1	42	Total	C	N	O	P	0	0
			863	410	169	243	41		

- Molecule 179 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
179	C2	49	Total	C	N	O	P	0	0
			1006	478	197	283	48		

- Molecule 180 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
180	C3	49	Total	C	N	O	P	0	0
			1008	480	195	285	48		

- Molecule 181 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
181	C4	42	Total	C	N	O	P	0	0
			865	415	152	257	41		

- Molecule 182 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
182	C5	42	Total	C	N	O	P	0	0
			851	410	148	252	41		

- Molecule 183 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
183	C6	38	Total	C	N	O	P	0	0
			769	375	114	243	37		

- Molecule 184 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
184	C7	40	Total	C	N	O	P	0	0
			808	390	138	241	39		

- Molecule 185 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
185	C8	36	Total	C	N	O	P	0	0
			734	354	123	222	35		

- Molecule 186 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
186	C9	50	Total	C	N	O	P	0	0
			1007	486	156	316	49		

- Molecule 187 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
187	DA	44	Total	C	N	O	P	0	0
			913	429	186	255	43		

- Molecule 188 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
188	DB	42	Total	C	N	O	P	0	0
			857	409	167	240	41		

- Molecule 189 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
189	DC	35	Total	C	N	O	P	0	0
			708	338	130	206	34		

- Molecule 190 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
190	DD	47	Total	C	N	O	P	0	0
			962	459	186	271	46		

- Molecule 191 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
191	DE	37	Total	C	N	O	P	0	0
			759	359	154	210	36		

- Molecule 192 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
192	DF	38	Total	C	N	O	P	0	0
			770	377	109	247	37		

- Molecule 193 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
193	DG	49	Total	C	N	O	P	0	0
			990	472	173	297	48		

- Molecule 194 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
194	DH	42	Total	C	N	O	P	0	0
			866	412	164	249	41		

- Molecule 195 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
195	DI	40	Total	C	N	O	P	0	0
			827	398	142	248	39		

- Molecule 196 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
196	DJ	42	Total	C	N	O	P	0	0
			852	407	154	250	41		

- Molecule 197 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
197	DK	35	Total	C	N	O	P	0	0
			718	340	146	198	34		

- Molecule 198 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
198	DL	44	Total	C	N	O	P	0	0
			888	435	123	287	43		

- Molecule 199 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
199	DM	38	Total	C	N	O	P	0	0
			771	374	115	245	37		

- Molecule 200 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
200	DN	42	Total	C	N	O	P	0	0
			870	408	180	241	41		

- Molecule 201 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
201	DO	49	Total	C	N	O	P	0	0
			990	475	167	300	48		

- Molecule 202 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
202	DP	35	Total	C	N	O	P	0	0
			710	340	122	214	34		

- Molecule 203 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
203	DQ	49	Total	C	N	O	P	0	0
			1003	478	188	289	48		

- Molecule 204 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
204	DR	49	Total	C	N	O	P	0	0
			1023	483	204	288	48		

- Molecule 205 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
205	DS	49	Total	C	N	O	P	0	0
			992	476	172	296	48		

- Molecule 206 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
206	DT	37	Total	C	N	O	P	0	0
			756	357	144	219	36		

- Molecule 207 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
207	DU	42	Total	C	N	O	P	0	0
			855	409	146	259	41		

- Molecule 208 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
208	DV	50	Total	C	N	O	P	0	0
			1009	484	167	309	49		

- Molecule 209 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
209	DW	44	Total	C	N	O	P	0	0
			891	436	128	284	43		

- Molecule 210 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
210	DX	40	Total	C	N	O	P	0	0
			813	391	137	246	39		

- Molecule 211 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
211	DY	42	Total	C	N	O	P	0	0
			857	410	154	252	41		

- Molecule 212 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
212	DZ	42	Total	C	N	O	P	0	0
			854	412	152	249	41		

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

3 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	31931	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 ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	0.194	Depositor
Minimum map value	-0.064	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.009	Depositor
Recommended contour level	0.06	Depositor
Map size (Å)	921.6, 921.6, 921.6	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.8, 1.8, 1.8	Depositor

4 Model quality [i](#)

4.1 Standard geometry [i](#)

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

4.2 Too-close contacts [i](#)

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

4.3 Torsion angles [i](#)

4.3.1 Protein backbone [i](#)

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

4.3.2 Protein sidechains [i](#)

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

4.3.3 RNA [i](#)

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

4.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

4.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

4.6 Ligand geometry [i](#)

There are no ligands in this entry.

4.7 Other polymers [i](#)

There are no such residues in this entry.

4.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

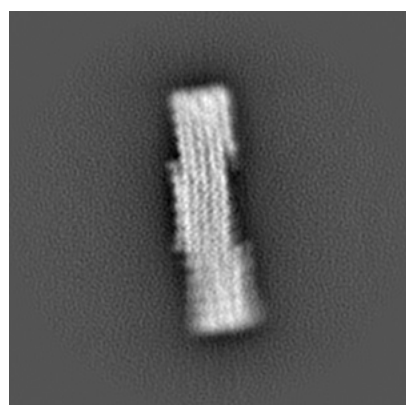
5 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-11387. These allow visual inspection of the internal detail of the map and identification of artifacts.

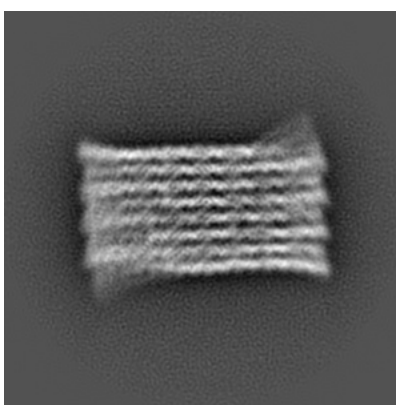
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

5.1 Orthogonal projections [i](#)

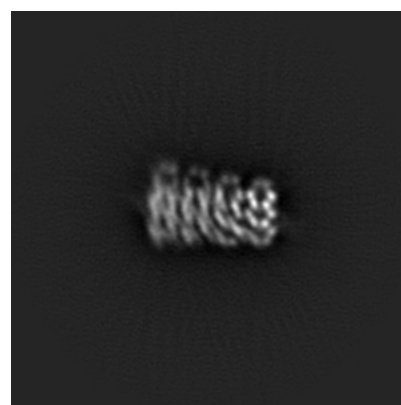
5.1.1 Primary map



X



Y

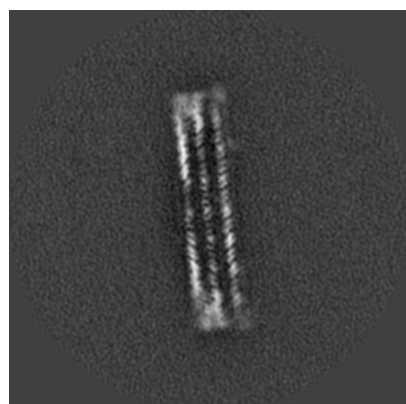


Z

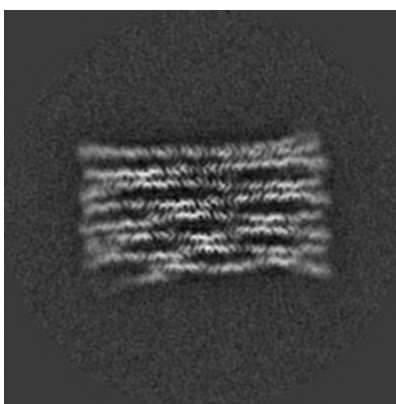
The images above show the map projected in three orthogonal directions.

5.2 Central slices [i](#)

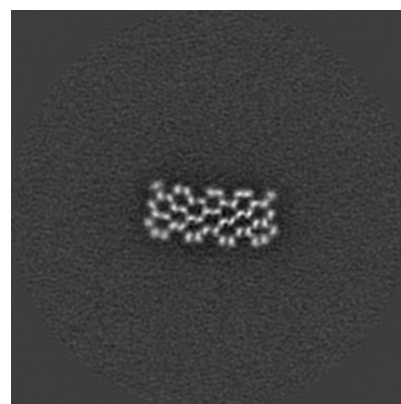
5.2.1 Primary map



X Index: 256



Y Index: 256

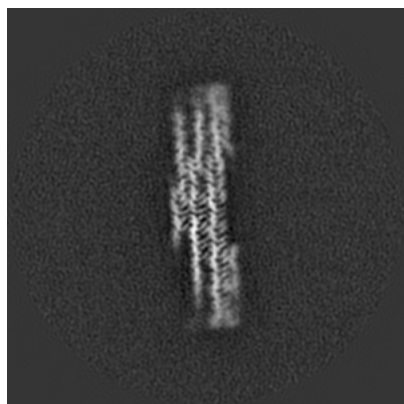


Z Index: 256

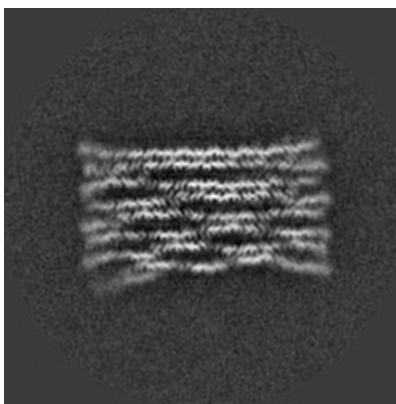
The images above show central slices of the map in three orthogonal directions.

5.3 Largest variance slices [i](#)

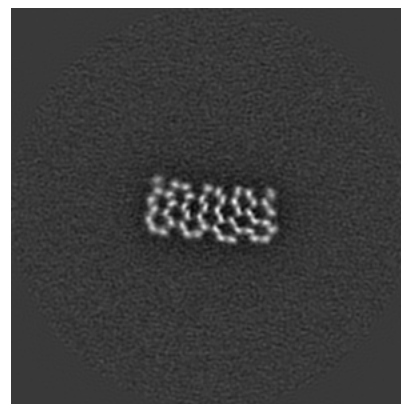
5.3.1 Primary map



X Index: 310



Y Index: 262

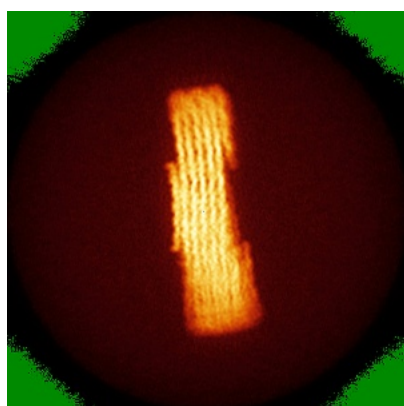


Z Index: 241

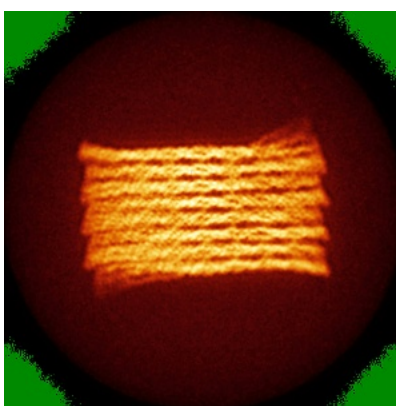
The images above show the largest variance slices of the map in three orthogonal directions.

5.4 Orthogonal standard-deviation projections (False-color) [i](#)

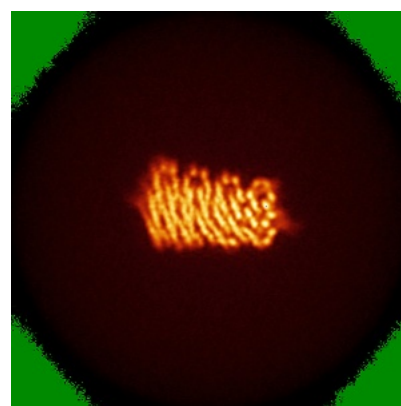
5.4.1 Primary map



X



Y

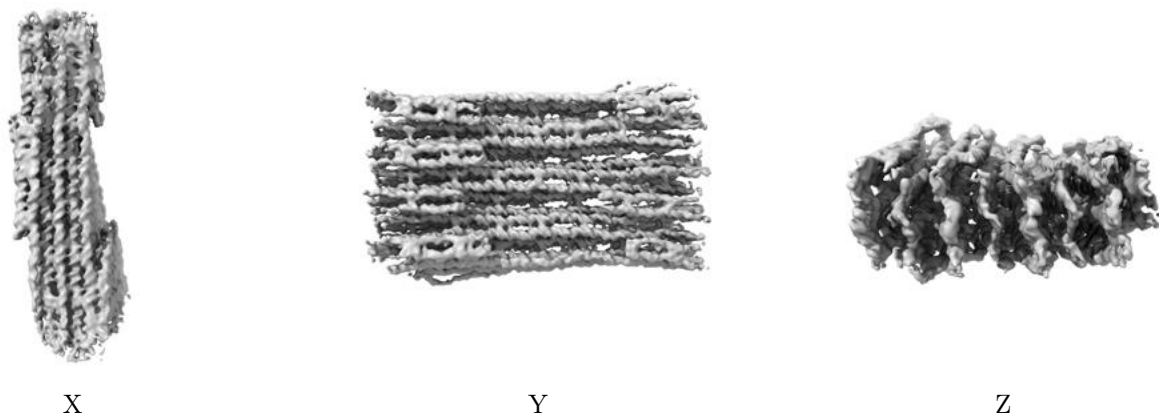


Z

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.

5.5 Orthogonal surface views [i](#)

5.5.1 Primary map



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.

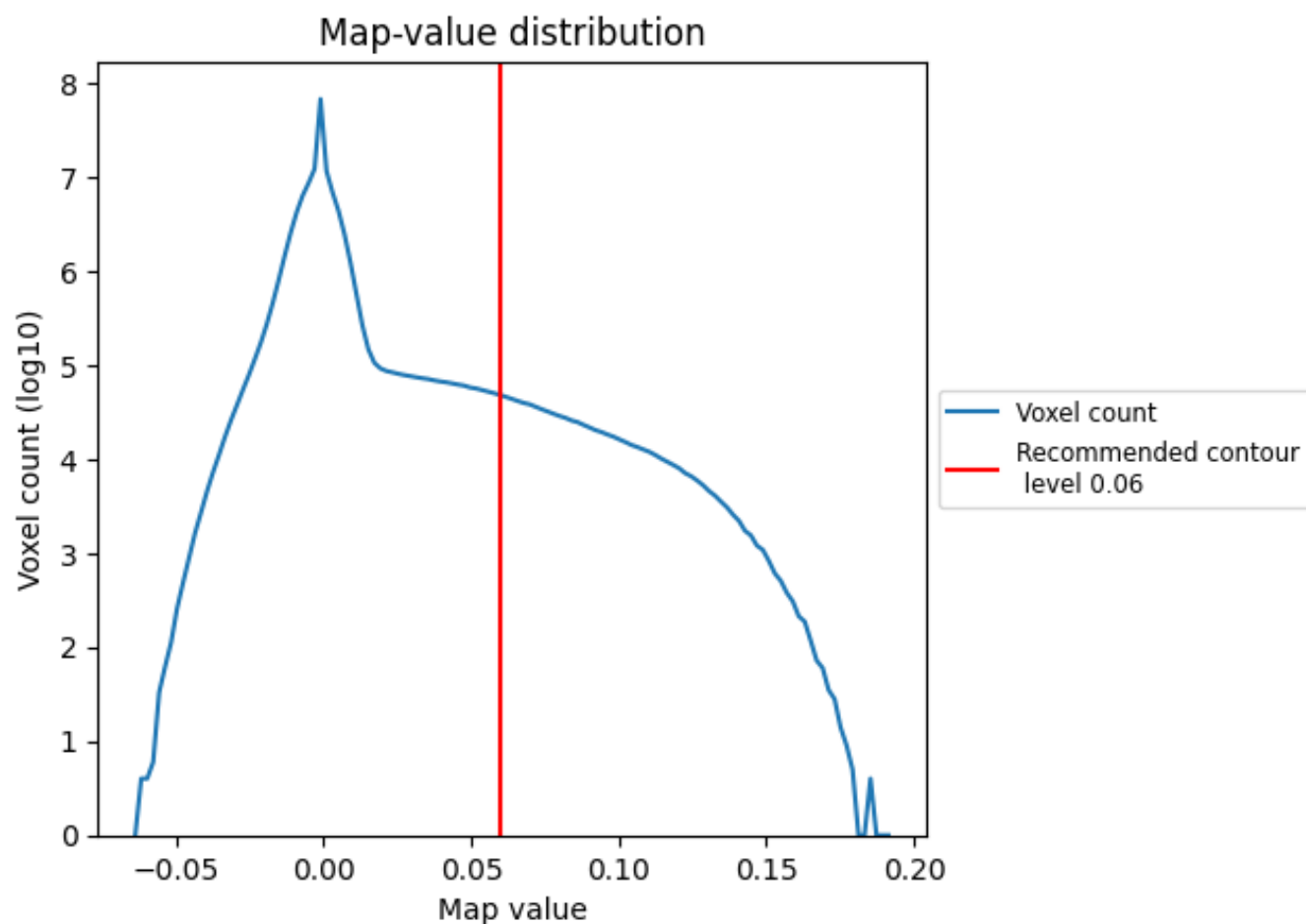
5.6 Mask visualisation [i](#)

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

6 Map analysis [i](#)

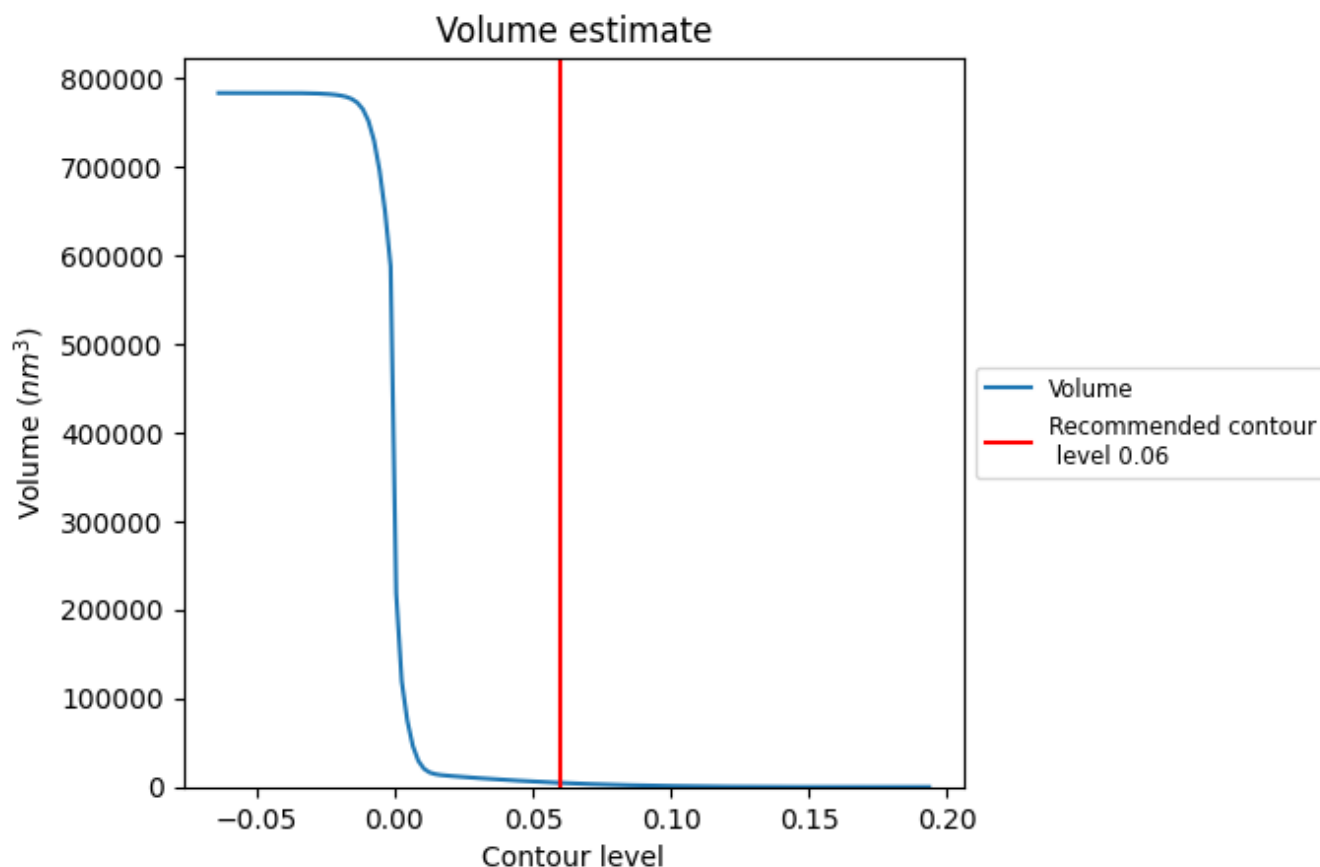
This section contains the results of statistical analysis of the map.

6.1 Map-value distribution [i](#)



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.

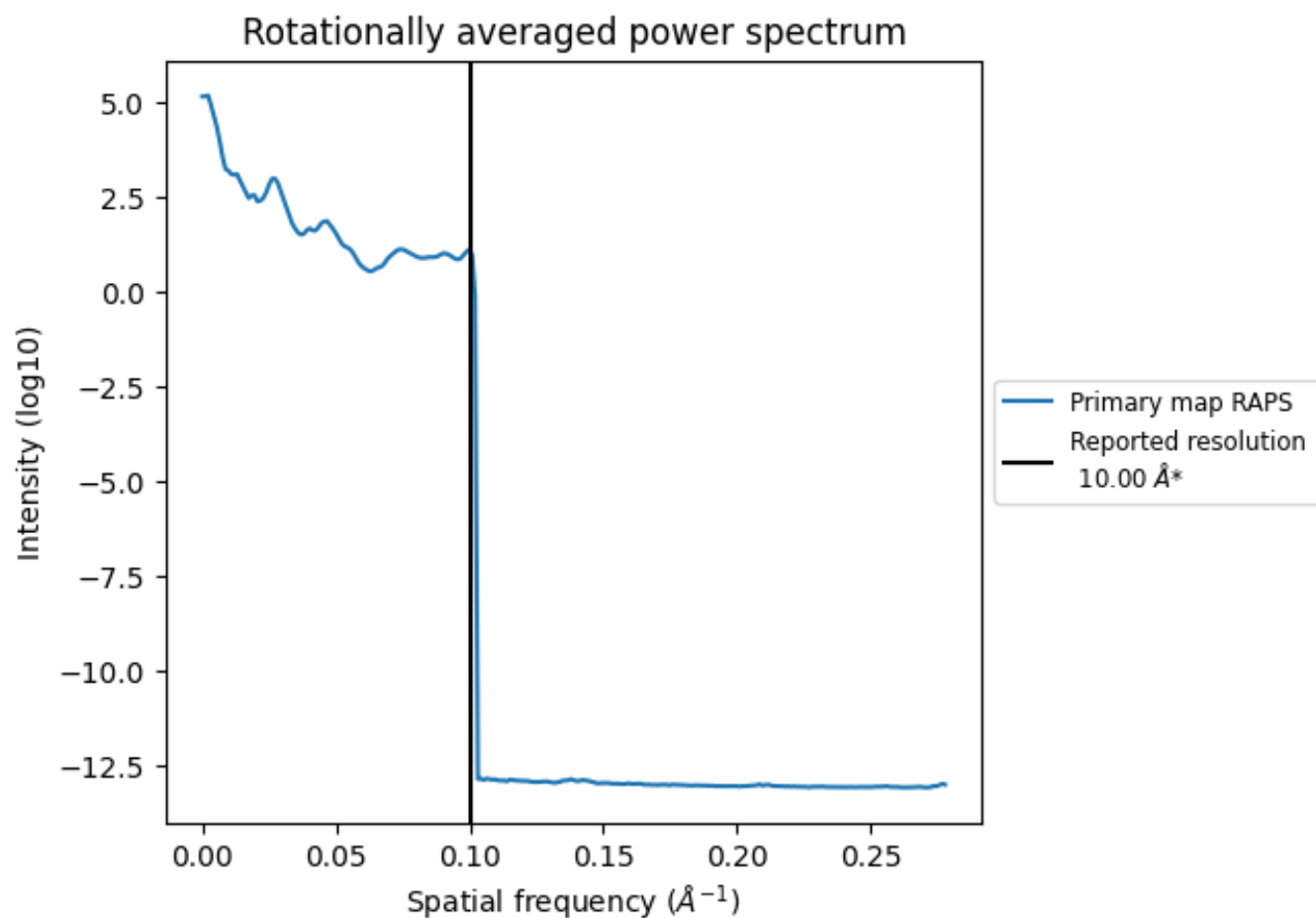
6.2 Volume estimate [i](#)



The volume at the recommended contour level is 4633 nm³; this corresponds to an approximate mass of 4185 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.

6.3 Rotationally averaged power spectrum ⓘ

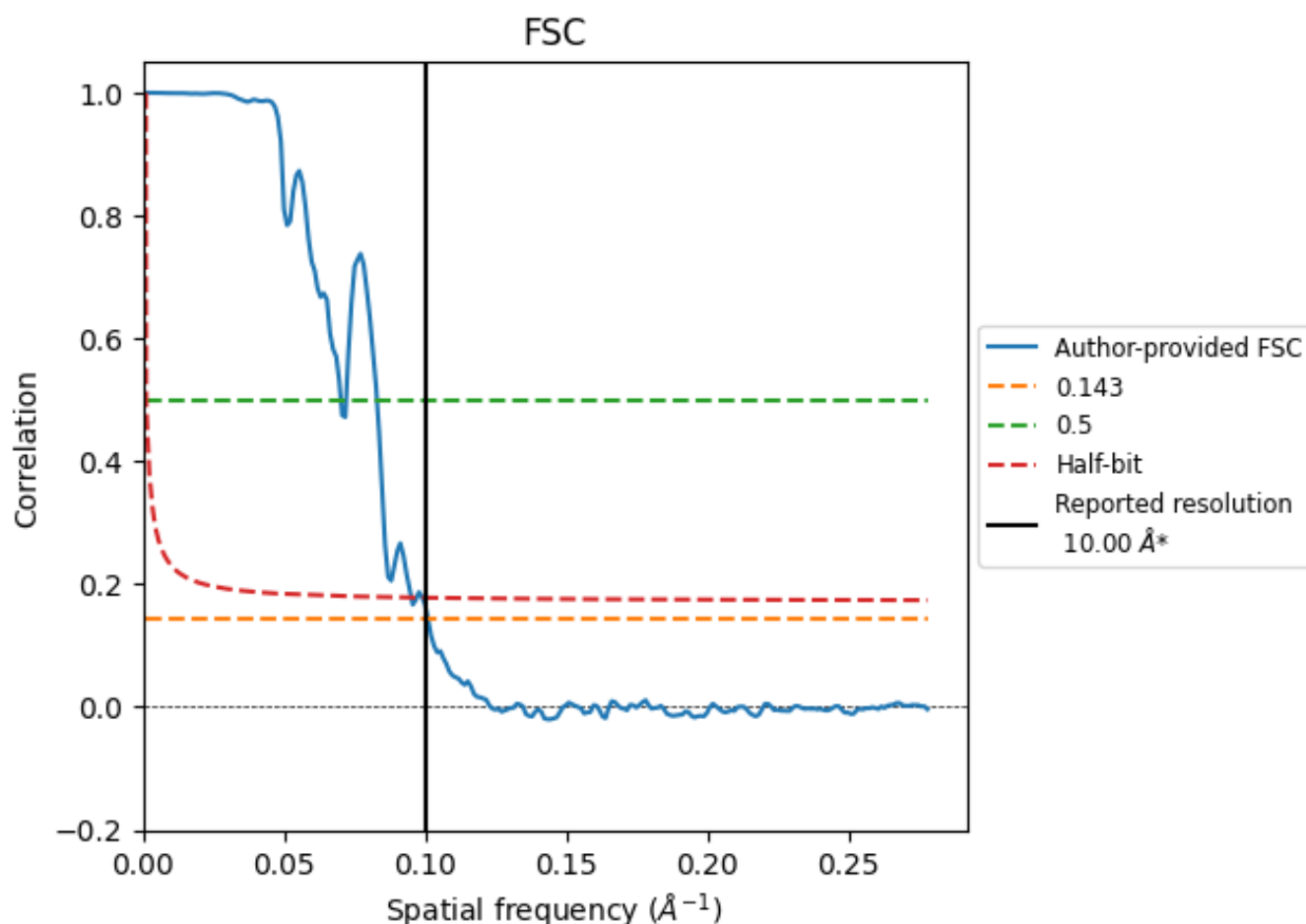


*Reported resolution corresponds to spatial frequency of 0.100 Å⁻¹

7 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

7.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.100 Å⁻¹

7.2 Resolution estimates [i](#)

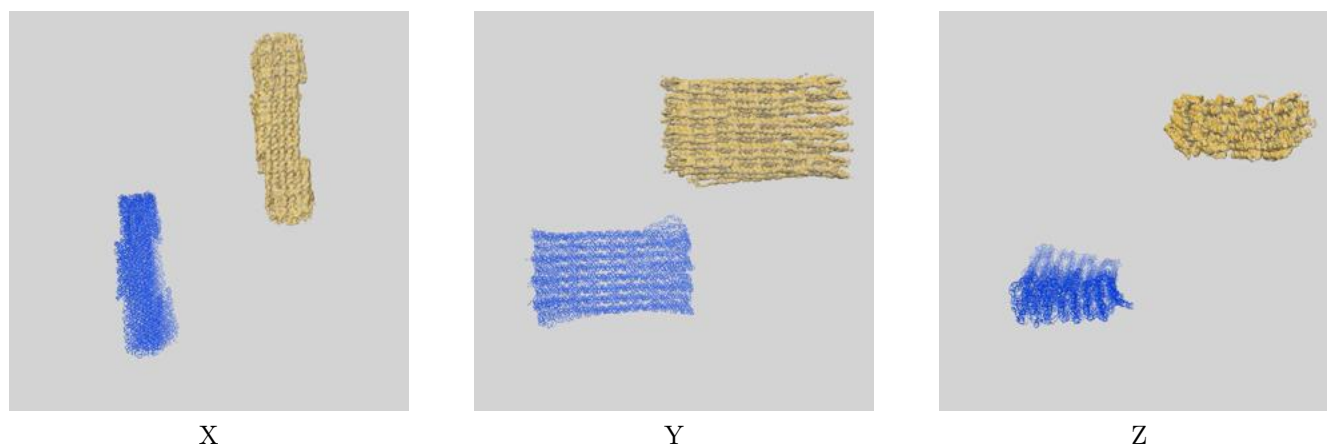
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	10.00	-	-
Author-provided FSC curve	9.91	14.27	10.53
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

8 Map-model fit [i](#)

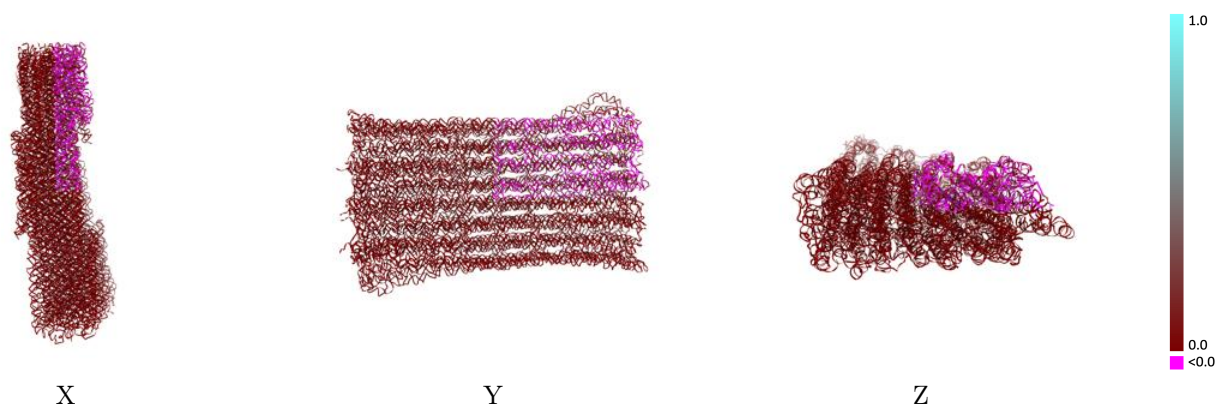
This section contains information regarding the fit between EMDB map EMD-11387 and PDB model 7ART. Per-residue inclusion information can be found in section ?? on page ??.

8.1 Map-model overlay [i](#)



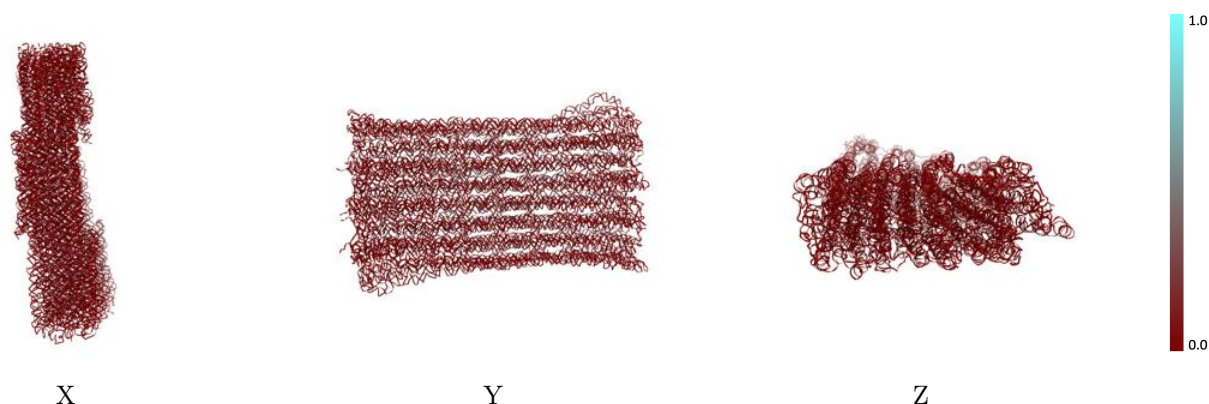
The images above show the 3D surface view of the map at the recommended contour level 0.06 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

8.2 Q-score mapped to coordinate model [i](#)



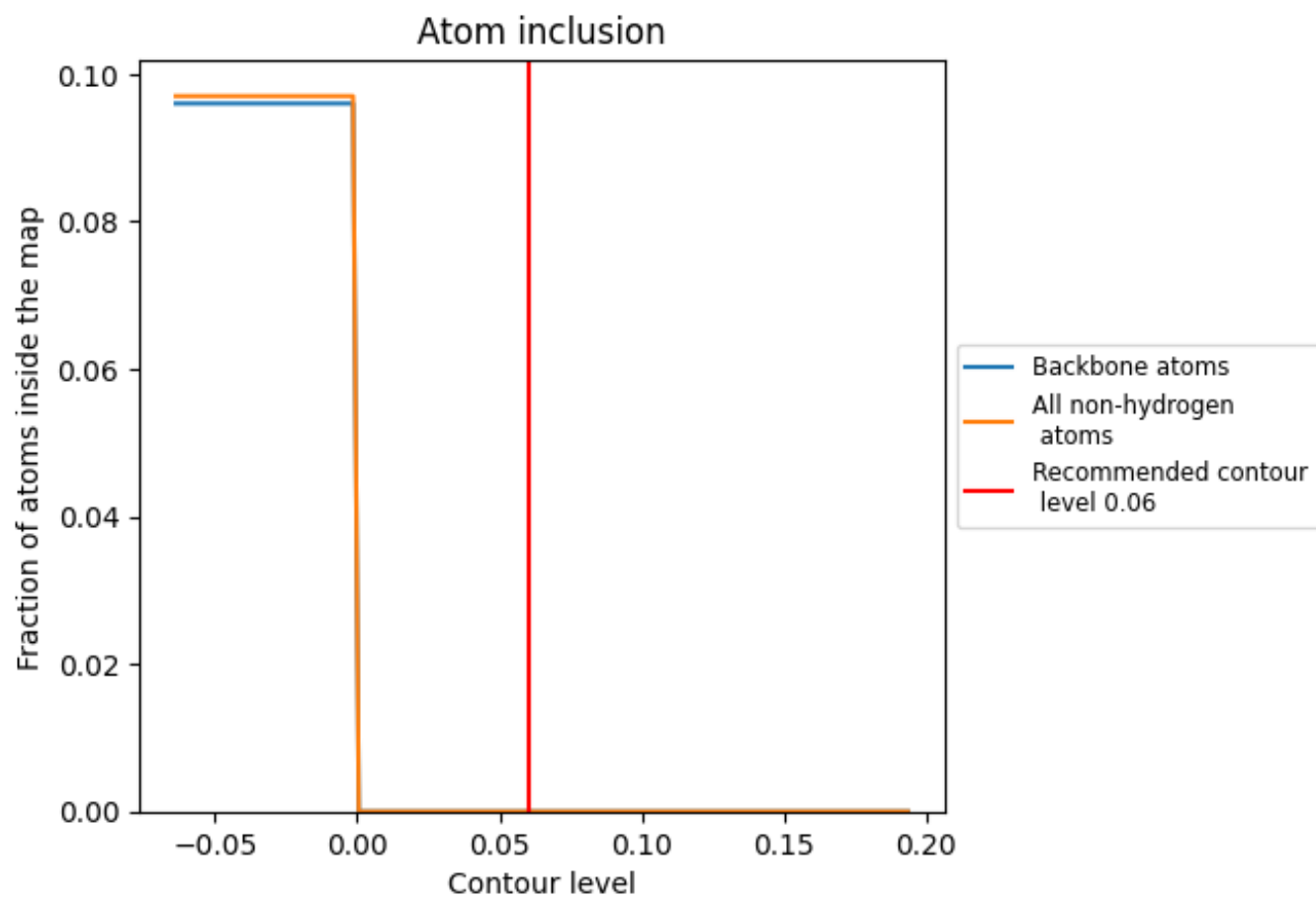
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

8.3 Atom inclusion mapped to coordinate model [i](#)



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).

8.4 Atom inclusion [i](#)



At the recommended contour level, 0% of all backbone atoms, 0% of all non-hydrogen atoms, are inside the map.

8.5 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	0.0000	-0.0010
A0	0.0000	0.0000
A1	0.0000	0.0000
A2	0.0000	0.0000
A3	0.0000	0.0000
A4	0.0000	0.0000
A5	0.0000	0.0000
A6	0.0000	0.0000
A7	0.0000	-0.0350
A8	0.0000	0.0000
A9	0.0000	-0.0080
AA	0.0000	-0.0010
AB	0.0000	0.0000
AC	0.0000	-0.0040
AD	0.0000	0.0000
AE	0.0000	0.0110
AF	0.0000	0.0230
AG	0.0000	0.0000
AH	0.0000	0.0000
AI	0.0000	-0.0020
AJ	0.0000	0.0030
AK	0.0000	0.0000
AL	0.0000	0.0000
AM	0.0000	0.0110
AN	0.0000	0.0000
AO	0.0000	0.0000
AP	0.0000	-0.0280
AQ	0.0000	-0.0240
AR	0.0000	0.0000
AS	0.0000	0.0000
AT	0.0000	0.0000
AU	0.0000	0.0000
AV	0.0000	0.0000
AW	0.0000	-0.0370
AX	0.0000	0.0000



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Chain	Atom inclusion	Q-score
AY	0.0000	0.0000
AZ	0.0000	0.0000
Aa	0.0000	-0.0160
Ab	0.0000	-0.0040
Ac	0.0000	0.0000
Ad	0.0000	0.0000
Ae	0.0000	0.0000
Af	0.0000	0.0000
Ag	0.0000	0.0060
Ah	0.0000	-0.0040
Ai	0.0000	-0.0160
Aj	0.0000	-0.0060
Ak	0.0000	-0.0060
Al	0.0000	0.0000
Am	0.0000	0.0000
An	0.0000	0.0000
Ao	0.0000	0.0060
Ap	0.0000	0.0000
Aq	0.0000	0.0000
Ar	0.0000	0.0000
As	0.0000	0.0000
At	0.0000	0.0000
Au	0.0000	-0.0130
Av	0.0000	0.0000
Aw	0.0000	0.0000
Ax	0.0000	0.0000
Ay	0.0000	0.0000
Az	0.0000	0.0000
B0	0.0000	0.0000
B1	0.0000	0.0000
B2	0.0000	0.0000
B3	0.0000	-0.0010
B4	0.0000	-0.0010
B5	0.0000	-0.0020
B6	0.0000	0.0000
B7	0.0000	0.0000
B8	0.0000	0.0000
B9	0.0000	0.0000
BA	0.0000	0.0000
BB	0.0000	-0.0060
BC	0.0000	0.0000
BD	0.0000	0.0000

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Chain	Atom inclusion	Q-score
BE	0.0000	0.0130
BF	0.0000	0.0100
BG	0.0000	0.0000
BH	0.0000	0.0000
BI	0.0000	0.0220
BJ	0.0000	0.0000
BK	0.0000	0.0060
BL	0.0000	0.0000
BM	0.0000	-0.0330
BN	0.0000	0.0000
BO	0.0000	0.0000
BP	0.0000	0.0000
BQ	0.0000	0.0000
BR	0.0000	0.0100
BS	0.0000	-0.0280
BT	0.0000	0.0020
BU	0.0000	0.0090
BV	0.0000	0.0010
BW	0.0000	-0.0010
BX	0.0000	0.0000
BY	0.0000	0.0000
BZ	0.0000	0.0000
Ba	0.0000	0.0000
Bb	0.0000	0.0000
Bc	0.0000	0.0000
Bd	0.0000	0.0000
Be	0.0000	0.0000
Bf	0.0000	0.0000
Bg	0.0000	0.0000
Bh	0.0000	0.0000
Bi	0.0000	-0.0310
Bj	0.0000	0.0000
Bk	0.0000	0.0000
Bl	0.0000	0.0000
Bm	0.0000	0.0000
Bn	0.0000	0.0000
Bo	0.0000	0.0000
Bp	0.0000	-0.0030
Bq	0.0000	0.0000
Br	0.0000	0.0000
Bs	0.0000	0.0000
Bt	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Bu	0.0000	0.0000
Bv	0.0000	0.0000
Bw	0.0000	-0.0010
Bx	0.0000	0.0000
By	0.0000	0.0000
Bz	0.0000	0.0000
C0	0.0000	0.0000
C1	0.0000	0.0000
C2	0.0000	0.0000
C3	0.0000	-0.0000
C4	0.0000	0.0000
C5	0.0000	0.0000
C6	0.0000	0.0000
C7	0.0000	0.0000
C8	0.0000	0.0000
C9	0.0000	0.0000
CA	0.0000	0.0000
CB	0.0000	-0.0120
CC	0.0000	0.0130
CD	0.0000	-0.0030
CE	0.0000	-0.0100
CF	0.0000	0.0000
CG	0.0000	0.0020
CH	0.0000	0.0000
CI	0.0000	0.0000
CJ	0.0000	0.0000
CK	0.0000	0.0000
CL	0.0000	0.0000
CM	0.0000	0.0000
CN	0.0000	0.0000
CO	0.0000	0.0000
CP	0.0000	0.0000
CQ	0.0000	0.0000
CR	0.0000	0.0000
CS	0.0000	0.0000
CT	0.0000	0.0000
CU	0.0000	0.0000
CV	0.0000	0.0000
CW	0.0000	0.0000
CX	0.0000	0.0000
CY	0.0000	0.0000
CZ	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Ca	0.0000	0.0000
Cb	0.0000	0.0000
Cc	0.0000	0.0000
Cd	0.0000	0.0000
Ce	0.0000	0.0000
Cf	0.0000	0.0000
Cg	0.0000	0.0000
Ch	0.0000	0.0000
Ci	0.0000	0.0000
Cj	0.0000	0.0000
Ck	0.0000	0.0000
Cl	0.0000	0.0000
Cm	0.0000	0.0000
Cn	0.0000	0.0000
Co	0.0000	0.0000
Cp	0.0000	0.0000
Cq	0.0000	0.0000
Cr	0.0000	0.0000
Cs	0.0000	0.0000
Ct	0.0000	0.0000
Cu	0.0000	0.0000
Cv	0.0000	0.0000
Cw	0.0000	0.0000
Cx	0.0000	0.0000
Cy	0.0000	0.0000
Cz	0.0000	0.0000
DA	0.0000	0.0000
DB	0.0000	0.0000
DC	0.0000	0.0000
DD	0.0000	0.0000
DE	0.0000	0.0000
DF	0.0000	0.0000
DG	0.0000	0.0000
DH	0.0000	0.0000
DI	0.0000	0.0000
DJ	0.0000	0.0000
DK	0.0000	0.0000
DL	0.0000	0.0000
DM	0.0000	0.0000
DN	0.0000	0.0000
DO	0.0000	0.0000
DP	0.0000	0.0000

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Chain	Atom inclusion	Q-score
DQ	 0.0000	 0.0000
DR	 0.0000	 0.0000
DS	 0.0000	 0.0000
DT	 0.0000	 0.0000
DU	 0.0000	 0.0000
DV	 0.0000	 0.0000
DW	 0.0000	 0.0000
DX	 0.0000	 0.0000
DY	 0.0000	 0.0000
DZ	 0.0000	 0.0000