



wwPDB EM Validation Summary Report ⓘ

Mar 3, 2024 – 12:05 PM EST

PDB ID : 6CBE
EMDB ID : EMD-7452
Title : Atomic structure of a rationally engineered gene delivery vector, AAV2.5
Authors : Burg, M.; Rosebrough, C.; Drouin, L.; Bennett, A.; Mietzsch, M.; Chipman, P.; McKenna, R.; Sousa, D.; Potter, M.; Byrne, B.; Kozyreva, O.G.; Samulski, R.J.; Agbandje-McKenna, M.
Deposited on : 2018-02-02
Resolution : 2.78 Å(reported)

This is a wwPDB EM Validation Summary 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.dev70
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

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Mol	Chain	Length	Quality of chain		
1	B	736	26%	70%	30%
1	C	736	24%	70%	30%
1	D	736	25%	70%	30%
1	E	736	23%	70%	30%
1	F	736	23%	70%	30%
1	G	736	25%	70%	30%
1	H	736	25%	70%	30%
1	I	736	24%	70%	30%
1	J	736	26%	70%	30%
1	K	736	24%	70%	30%
1	L	736	26%	70%	30%
1	M	736	25%	70%	30%
1	N	736	24%	70%	30%
1	O	736	26%	70%	30%
1	P	736	24%	70%	30%
1	Q	736	23%	70%	30%
1	R	736	24%	70%	30%
1	S	736	25%	70%	30%
1	T	736	25%	70%	30%
1	U	736	24%	70%	30%
1	V	736	26%	70%	30%
1	W	736	24%	70%	30%
1	X	736	26%	70%	30%
1	Y	736	24%	70%	30%
1	Z	736	23%	70%	30%

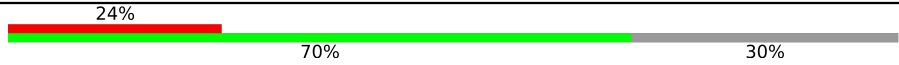
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Mol	Chain	Length	Quality of chain		
1	a	736	25%	70%	30%
1	b	736	24%	70%	30%
1	c	736	23%	70%	30%
1	d	736	23%	70%	30%
1	e	736	23%	70%	30%
1	f	736	24%	70%	30%
1	g	736	26%	70%	30%
1	h	736	25%	70%	30%
1	i	736	23%	70%	30%
1	j	736	23%	70%	30%
1	k	736	25%	70%	30%
1	l	736	24%	70%	30%
1	m	736	24%	70%	30%
1	n	736	26%	70%	30%
1	o	736	26%	70%	30%
1	p	736	26%	70%	30%
1	q	736	24%	70%	30%
1	r	736	25%	70%	30%
1	s	736	24%	70%	30%
1	t	736	25%	70%	30%
1	u	736	24%	70%	30%
1	v	736	24%	70%	30%
1	w	736	23%	70%	30%
1	x	736	23%	70%	30%
1	y	736	24%	70%	30%

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Mol	Chain	Length	Quality of chain
1	z	736	 <p>A horizontal bar chart representing the quality of chain. The bar is divided into three segments: a red segment on the left labeled '24%', a green segment in the middle labeled '70%', and a grey segment on the right labeled '30%'. The segments are stacked horizontally, with the red segment starting from the left, followed by the green segment, and the grey segment ending at the right.</p>

2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 248520 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 Capsid protein VP1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	518	4142	2606	723	800	13	0	0
1	B	518	4142	2606	723	800	13	0	0
1	C	518	4142	2606	723	800	13	0	0
1	D	518	4142	2606	723	800	13	0	0
1	E	518	4142	2606	723	800	13	0	0
1	F	518	4142	2606	723	800	13	0	0
1	G	518	4142	2606	723	800	13	0	0
1	H	518	4142	2606	723	800	13	0	0
1	I	518	4142	2606	723	800	13	0	0
1	J	518	4142	2606	723	800	13	0	0
1	K	518	4142	2606	723	800	13	0	0
1	L	518	4142	2606	723	800	13	0	0
1	M	518	4142	2606	723	800	13	0	0
1	N	518	4142	2606	723	800	13	0	0
1	O	518	4142	2606	723	800	13	0	0
1	P	518	4142	2606	723	800	13	0	0
1	Q	518	4142	2606	723	800	13	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	R	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	S	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	T	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	U	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	V	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	W	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	X	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	Y	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	Z	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	0	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	1	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	2	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	3	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	4	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	5	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	a	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	b	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	c	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	d	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	e	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	f	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	g	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	h	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	i	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	j	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	k	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	l	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	m	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	n	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	o	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	p	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	q	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	r	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	s	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	t	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	u	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	v	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	w	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	x	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	y	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	z	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		
1	6	518	Total	C	N	O	S	0	0
			4142	2606	723	800	13		

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Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	7	518	4142	2606	723	800	13	0	0

There are 300 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	263	ALA	GLN	conflict	UNP P03135
A	265	THR	-	insertion	UNP P03135
A	706	ALA	ASN	conflict	UNP P03135
A	709	ALA	VAL	conflict	UNP P03135
A	717	ASN	THR	conflict	UNP P03135
B	263	ALA	GLN	conflict	UNP P03135
B	265	THR	-	insertion	UNP P03135
B	706	ALA	ASN	conflict	UNP P03135
B	709	ALA	VAL	conflict	UNP P03135
B	717	ASN	THR	conflict	UNP P03135
C	263	ALA	GLN	conflict	UNP P03135
C	265	THR	-	insertion	UNP P03135
C	706	ALA	ASN	conflict	UNP P03135
C	709	ALA	VAL	conflict	UNP P03135
C	717	ASN	THR	conflict	UNP P03135
D	263	ALA	GLN	conflict	UNP P03135
D	265	THR	-	insertion	UNP P03135
D	706	ALA	ASN	conflict	UNP P03135
D	709	ALA	VAL	conflict	UNP P03135
D	717	ASN	THR	conflict	UNP P03135
E	263	ALA	GLN	conflict	UNP P03135
E	265	THR	-	insertion	UNP P03135
E	706	ALA	ASN	conflict	UNP P03135
E	709	ALA	VAL	conflict	UNP P03135
E	717	ASN	THR	conflict	UNP P03135
F	263	ALA	GLN	conflict	UNP P03135
F	265	THR	-	insertion	UNP P03135
F	706	ALA	ASN	conflict	UNP P03135
F	709	ALA	VAL	conflict	UNP P03135
F	717	ASN	THR	conflict	UNP P03135
G	263	ALA	GLN	conflict	UNP P03135
G	265	THR	-	insertion	UNP P03135
G	706	ALA	ASN	conflict	UNP P03135
G	709	ALA	VAL	conflict	UNP P03135
G	717	ASN	THR	conflict	UNP P03135
H	263	ALA	GLN	conflict	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
H	265	THR	-	insertion	UNP P03135
H	706	ALA	ASN	conflict	UNP P03135
H	709	ALA	VAL	conflict	UNP P03135
H	717	ASN	THR	conflict	UNP P03135
I	263	ALA	GLN	conflict	UNP P03135
I	265	THR	-	insertion	UNP P03135
I	706	ALA	ASN	conflict	UNP P03135
I	709	ALA	VAL	conflict	UNP P03135
I	717	ASN	THR	conflict	UNP P03135
J	263	ALA	GLN	conflict	UNP P03135
J	265	THR	-	insertion	UNP P03135
J	706	ALA	ASN	conflict	UNP P03135
J	709	ALA	VAL	conflict	UNP P03135
J	717	ASN	THR	conflict	UNP P03135
K	263	ALA	GLN	conflict	UNP P03135
K	265	THR	-	insertion	UNP P03135
K	706	ALA	ASN	conflict	UNP P03135
K	709	ALA	VAL	conflict	UNP P03135
K	717	ASN	THR	conflict	UNP P03135
L	263	ALA	GLN	conflict	UNP P03135
L	265	THR	-	insertion	UNP P03135
L	706	ALA	ASN	conflict	UNP P03135
L	709	ALA	VAL	conflict	UNP P03135
L	717	ASN	THR	conflict	UNP P03135
M	263	ALA	GLN	conflict	UNP P03135
M	265	THR	-	insertion	UNP P03135
M	706	ALA	ASN	conflict	UNP P03135
M	709	ALA	VAL	conflict	UNP P03135
M	717	ASN	THR	conflict	UNP P03135
N	263	ALA	GLN	conflict	UNP P03135
N	265	THR	-	insertion	UNP P03135
N	706	ALA	ASN	conflict	UNP P03135
N	709	ALA	VAL	conflict	UNP P03135
N	717	ASN	THR	conflict	UNP P03135
O	263	ALA	GLN	conflict	UNP P03135
O	265	THR	-	insertion	UNP P03135
O	706	ALA	ASN	conflict	UNP P03135
O	709	ALA	VAL	conflict	UNP P03135
O	717	ASN	THR	conflict	UNP P03135
P	263	ALA	GLN	conflict	UNP P03135
P	265	THR	-	insertion	UNP P03135
P	706	ALA	ASN	conflict	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
P	709	ALA	VAL	conflict	UNP P03135
P	717	ASN	THR	conflict	UNP P03135
Q	263	ALA	GLN	conflict	UNP P03135
Q	265	THR	-	insertion	UNP P03135
Q	706	ALA	ASN	conflict	UNP P03135
Q	709	ALA	VAL	conflict	UNP P03135
Q	717	ASN	THR	conflict	UNP P03135
R	263	ALA	GLN	conflict	UNP P03135
R	265	THR	-	insertion	UNP P03135
R	706	ALA	ASN	conflict	UNP P03135
R	709	ALA	VAL	conflict	UNP P03135
R	717	ASN	THR	conflict	UNP P03135
S	263	ALA	GLN	conflict	UNP P03135
S	265	THR	-	insertion	UNP P03135
S	706	ALA	ASN	conflict	UNP P03135
S	709	ALA	VAL	conflict	UNP P03135
S	717	ASN	THR	conflict	UNP P03135
T	263	ALA	GLN	conflict	UNP P03135
T	265	THR	-	insertion	UNP P03135
T	706	ALA	ASN	conflict	UNP P03135
T	709	ALA	VAL	conflict	UNP P03135
T	717	ASN	THR	conflict	UNP P03135
U	263	ALA	GLN	conflict	UNP P03135
U	265	THR	-	insertion	UNP P03135
U	706	ALA	ASN	conflict	UNP P03135
U	709	ALA	VAL	conflict	UNP P03135
U	717	ASN	THR	conflict	UNP P03135
V	263	ALA	GLN	conflict	UNP P03135
V	265	THR	-	insertion	UNP P03135
V	706	ALA	ASN	conflict	UNP P03135
V	709	ALA	VAL	conflict	UNP P03135
V	717	ASN	THR	conflict	UNP P03135
W	263	ALA	GLN	conflict	UNP P03135
W	265	THR	-	insertion	UNP P03135
W	706	ALA	ASN	conflict	UNP P03135
W	709	ALA	VAL	conflict	UNP P03135
W	717	ASN	THR	conflict	UNP P03135
X	263	ALA	GLN	conflict	UNP P03135
X	265	THR	-	insertion	UNP P03135
X	706	ALA	ASN	conflict	UNP P03135
X	709	ALA	VAL	conflict	UNP P03135
X	717	ASN	THR	conflict	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
Y	263	ALA	GLN	conflict	UNP P03135
Y	265	THR	-	insertion	UNP P03135
Y	706	ALA	ASN	conflict	UNP P03135
Y	709	ALA	VAL	conflict	UNP P03135
Y	717	ASN	THR	conflict	UNP P03135
Z	263	ALA	GLN	conflict	UNP P03135
Z	265	THR	-	insertion	UNP P03135
Z	706	ALA	ASN	conflict	UNP P03135
Z	709	ALA	VAL	conflict	UNP P03135
Z	717	ASN	THR	conflict	UNP P03135
0	263	ALA	GLN	conflict	UNP P03135
0	265	THR	-	insertion	UNP P03135
0	706	ALA	ASN	conflict	UNP P03135
0	709	ALA	VAL	conflict	UNP P03135
0	717	ASN	THR	conflict	UNP P03135
1	263	ALA	GLN	conflict	UNP P03135
1	265	THR	-	insertion	UNP P03135
1	706	ALA	ASN	conflict	UNP P03135
1	709	ALA	VAL	conflict	UNP P03135
1	717	ASN	THR	conflict	UNP P03135
2	263	ALA	GLN	conflict	UNP P03135
2	265	THR	-	insertion	UNP P03135
2	706	ALA	ASN	conflict	UNP P03135
2	709	ALA	VAL	conflict	UNP P03135
2	717	ASN	THR	conflict	UNP P03135
3	263	ALA	GLN	conflict	UNP P03135
3	265	THR	-	insertion	UNP P03135
3	706	ALA	ASN	conflict	UNP P03135
3	709	ALA	VAL	conflict	UNP P03135
3	717	ASN	THR	conflict	UNP P03135
4	263	ALA	GLN	conflict	UNP P03135
4	265	THR	-	insertion	UNP P03135
4	706	ALA	ASN	conflict	UNP P03135
4	709	ALA	VAL	conflict	UNP P03135
4	717	ASN	THR	conflict	UNP P03135
5	263	ALA	GLN	conflict	UNP P03135
5	265	THR	-	insertion	UNP P03135
5	706	ALA	ASN	conflict	UNP P03135
5	709	ALA	VAL	conflict	UNP P03135
5	717	ASN	THR	conflict	UNP P03135
a	263	ALA	GLN	conflict	UNP P03135
a	265	THR	-	insertion	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
a	706	ALA	ASN	conflict	UNP P03135
a	709	ALA	VAL	conflict	UNP P03135
a	717	ASN	THR	conflict	UNP P03135
b	263	ALA	GLN	conflict	UNP P03135
b	265	THR	-	insertion	UNP P03135
b	706	ALA	ASN	conflict	UNP P03135
b	709	ALA	VAL	conflict	UNP P03135
b	717	ASN	THR	conflict	UNP P03135
c	263	ALA	GLN	conflict	UNP P03135
c	265	THR	-	insertion	UNP P03135
c	706	ALA	ASN	conflict	UNP P03135
c	709	ALA	VAL	conflict	UNP P03135
c	717	ASN	THR	conflict	UNP P03135
d	263	ALA	GLN	conflict	UNP P03135
d	265	THR	-	insertion	UNP P03135
d	706	ALA	ASN	conflict	UNP P03135
d	709	ALA	VAL	conflict	UNP P03135
d	717	ASN	THR	conflict	UNP P03135
e	263	ALA	GLN	conflict	UNP P03135
e	265	THR	-	insertion	UNP P03135
e	706	ALA	ASN	conflict	UNP P03135
e	709	ALA	VAL	conflict	UNP P03135
e	717	ASN	THR	conflict	UNP P03135
f	263	ALA	GLN	conflict	UNP P03135
f	265	THR	-	insertion	UNP P03135
f	706	ALA	ASN	conflict	UNP P03135
f	709	ALA	VAL	conflict	UNP P03135
f	717	ASN	THR	conflict	UNP P03135
g	263	ALA	GLN	conflict	UNP P03135
g	265	THR	-	insertion	UNP P03135
g	706	ALA	ASN	conflict	UNP P03135
g	709	ALA	VAL	conflict	UNP P03135
g	717	ASN	THR	conflict	UNP P03135
h	263	ALA	GLN	conflict	UNP P03135
h	265	THR	-	insertion	UNP P03135
h	706	ALA	ASN	conflict	UNP P03135
h	709	ALA	VAL	conflict	UNP P03135
h	717	ASN	THR	conflict	UNP P03135
i	263	ALA	GLN	conflict	UNP P03135
i	265	THR	-	insertion	UNP P03135
i	706	ALA	ASN	conflict	UNP P03135
i	709	ALA	VAL	conflict	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
i	717	ASN	THR	conflict	UNP P03135
j	263	ALA	GLN	conflict	UNP P03135
j	265	THR	-	insertion	UNP P03135
j	706	ALA	ASN	conflict	UNP P03135
j	709	ALA	VAL	conflict	UNP P03135
j	717	ASN	THR	conflict	UNP P03135
k	263	ALA	GLN	conflict	UNP P03135
k	265	THR	-	insertion	UNP P03135
k	706	ALA	ASN	conflict	UNP P03135
k	709	ALA	VAL	conflict	UNP P03135
k	717	ASN	THR	conflict	UNP P03135
l	263	ALA	GLN	conflict	UNP P03135
l	265	THR	-	insertion	UNP P03135
l	706	ALA	ASN	conflict	UNP P03135
l	709	ALA	VAL	conflict	UNP P03135
l	717	ASN	THR	conflict	UNP P03135
m	263	ALA	GLN	conflict	UNP P03135
m	265	THR	-	insertion	UNP P03135
m	706	ALA	ASN	conflict	UNP P03135
m	709	ALA	VAL	conflict	UNP P03135
m	717	ASN	THR	conflict	UNP P03135
n	263	ALA	GLN	conflict	UNP P03135
n	265	THR	-	insertion	UNP P03135
n	706	ALA	ASN	conflict	UNP P03135
n	709	ALA	VAL	conflict	UNP P03135
n	717	ASN	THR	conflict	UNP P03135
o	263	ALA	GLN	conflict	UNP P03135
o	265	THR	-	insertion	UNP P03135
o	706	ALA	ASN	conflict	UNP P03135
o	709	ALA	VAL	conflict	UNP P03135
o	717	ASN	THR	conflict	UNP P03135
p	263	ALA	GLN	conflict	UNP P03135
p	265	THR	-	insertion	UNP P03135
p	706	ALA	ASN	conflict	UNP P03135
p	709	ALA	VAL	conflict	UNP P03135
p	717	ASN	THR	conflict	UNP P03135
q	263	ALA	GLN	conflict	UNP P03135
q	265	THR	-	insertion	UNP P03135
q	706	ALA	ASN	conflict	UNP P03135
q	709	ALA	VAL	conflict	UNP P03135
q	717	ASN	THR	conflict	UNP P03135
r	263	ALA	GLN	conflict	UNP P03135

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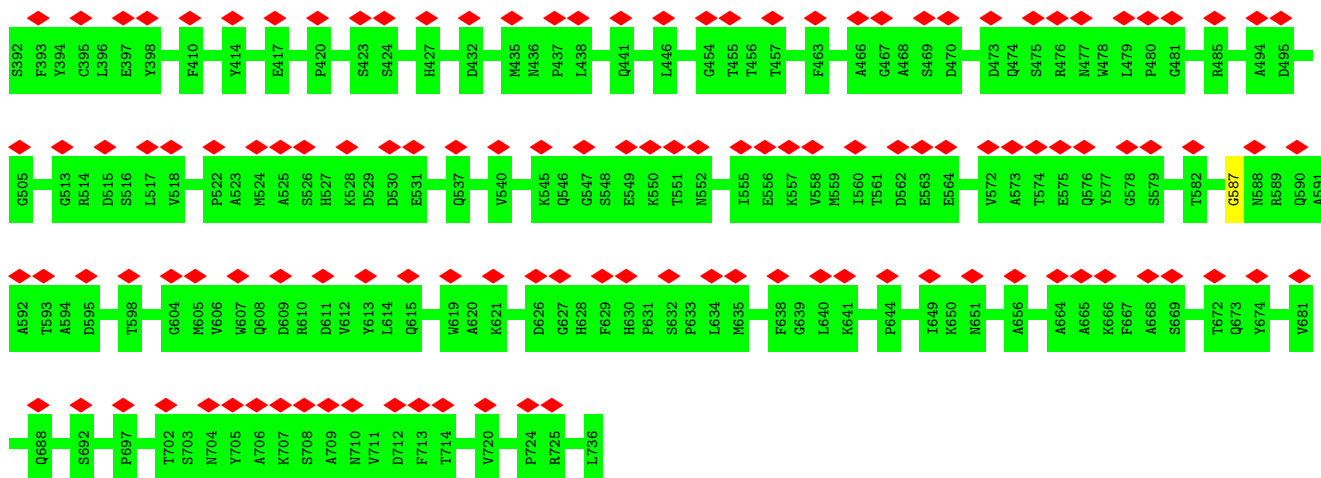
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Chain	Residue	Modelled	Actual	Comment	Reference
r	265	THR	-	insertion	UNP P03135
r	706	ALA	ASN	conflict	UNP P03135
r	709	ALA	VAL	conflict	UNP P03135
r	717	ASN	THR	conflict	UNP P03135
s	263	ALA	GLN	conflict	UNP P03135
s	265	THR	-	insertion	UNP P03135
s	706	ALA	ASN	conflict	UNP P03135
s	709	ALA	VAL	conflict	UNP P03135
s	717	ASN	THR	conflict	UNP P03135
t	263	ALA	GLN	conflict	UNP P03135
t	265	THR	-	insertion	UNP P03135
t	706	ALA	ASN	conflict	UNP P03135
t	709	ALA	VAL	conflict	UNP P03135
t	717	ASN	THR	conflict	UNP P03135
u	263	ALA	GLN	conflict	UNP P03135
u	265	THR	-	insertion	UNP P03135
u	706	ALA	ASN	conflict	UNP P03135
u	709	ALA	VAL	conflict	UNP P03135
u	717	ASN	THR	conflict	UNP P03135
v	263	ALA	GLN	conflict	UNP P03135
v	265	THR	-	insertion	UNP P03135
v	706	ALA	ASN	conflict	UNP P03135
v	709	ALA	VAL	conflict	UNP P03135
v	717	ASN	THR	conflict	UNP P03135
w	263	ALA	GLN	conflict	UNP P03135
w	265	THR	-	insertion	UNP P03135
w	706	ALA	ASN	conflict	UNP P03135
w	709	ALA	VAL	conflict	UNP P03135
w	717	ASN	THR	conflict	UNP P03135
x	263	ALA	GLN	conflict	UNP P03135
x	265	THR	-	insertion	UNP P03135
x	706	ALA	ASN	conflict	UNP P03135
x	709	ALA	VAL	conflict	UNP P03135
x	717	ASN	THR	conflict	UNP P03135
y	263	ALA	GLN	conflict	UNP P03135
y	265	THR	-	insertion	UNP P03135
y	706	ALA	ASN	conflict	UNP P03135
y	709	ALA	VAL	conflict	UNP P03135
y	717	ASN	THR	conflict	UNP P03135
z	263	ALA	GLN	conflict	UNP P03135
z	265	THR	-	insertion	UNP P03135
z	706	ALA	ASN	conflict	UNP P03135

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Chain	Residue	Modelled	Actual	Comment	Reference
z	709	ALA	VAL	conflict	UNP P03135
z	717	ASN	THR	conflict	UNP P03135
6	263	ALA	GLN	conflict	UNP P03135
6	265	THR	-	insertion	UNP P03135
6	706	ALA	ASN	conflict	UNP P03135
6	709	ALA	VAL	conflict	UNP P03135
6	717	ASN	THR	conflict	UNP P03135
7	263	ALA	GLN	conflict	UNP P03135
7	265	THR	-	insertion	UNP P03135
7	706	ALA	ASN	conflict	UNP P03135
7	709	ALA	VAL	conflict	UNP P03135
7	717	ASN	THR	conflict	UNP P03135



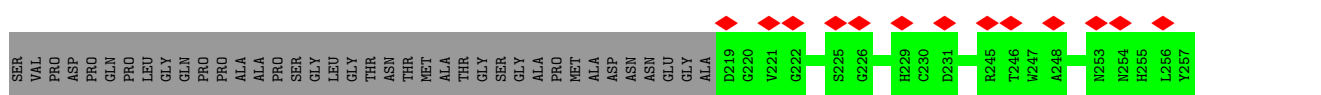
• Molecule 1: Capsid protein VP1



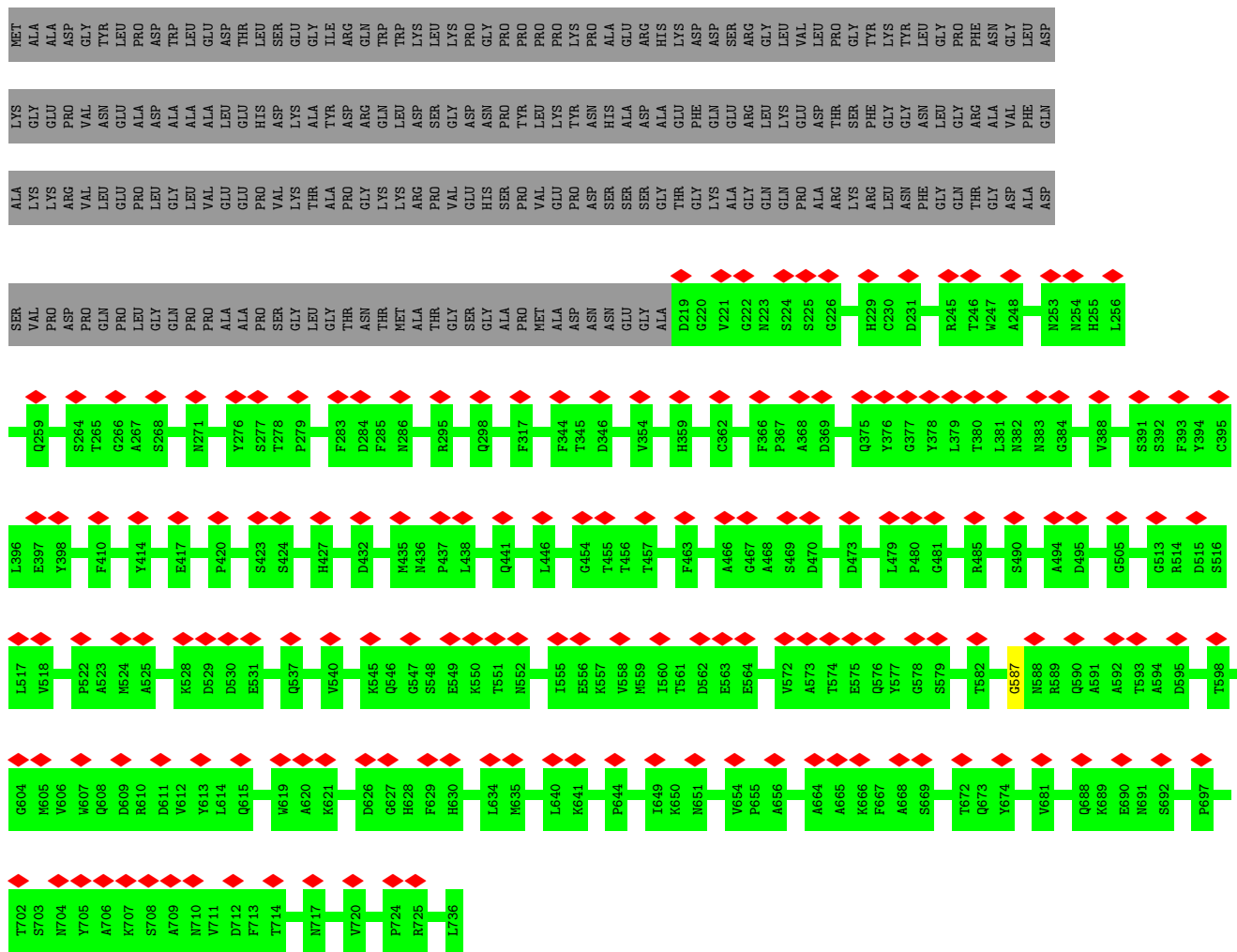
MET ALA ALA ASP GLY TYR LEU PRO ASP G604 M605 V606 W607 Q608 D609 R610 D611 V612 Y613 L614 Q615 W619 A620 K621 D626 G627 H628 F629 H630 P631 S632 P633 L634 M635 F638 G639 L640 K641 P644 I649 K650 N651 A656 A664 A665 K666 F667 A668 S669 T672 Q673 Y674 V681

LYS GLU PRO VAL ASN GLU ALA ASP HIS LEU ASP LYS GLY TYR ASP ARG GLN TRP LYS LEU ASP SER LEU GLY ASP ASN GLY PRO TYR PRO LEU LEU TYR ASN HIS ALA GLU SER ASP ARG ALA HIS LYS ASP PHE GLN GLN SER ARG LEU LYS LEU VAL ASP LEU LEU PHE ASN LEU PRO GLY PHE ARG ALA VAL PHE GLN ASP

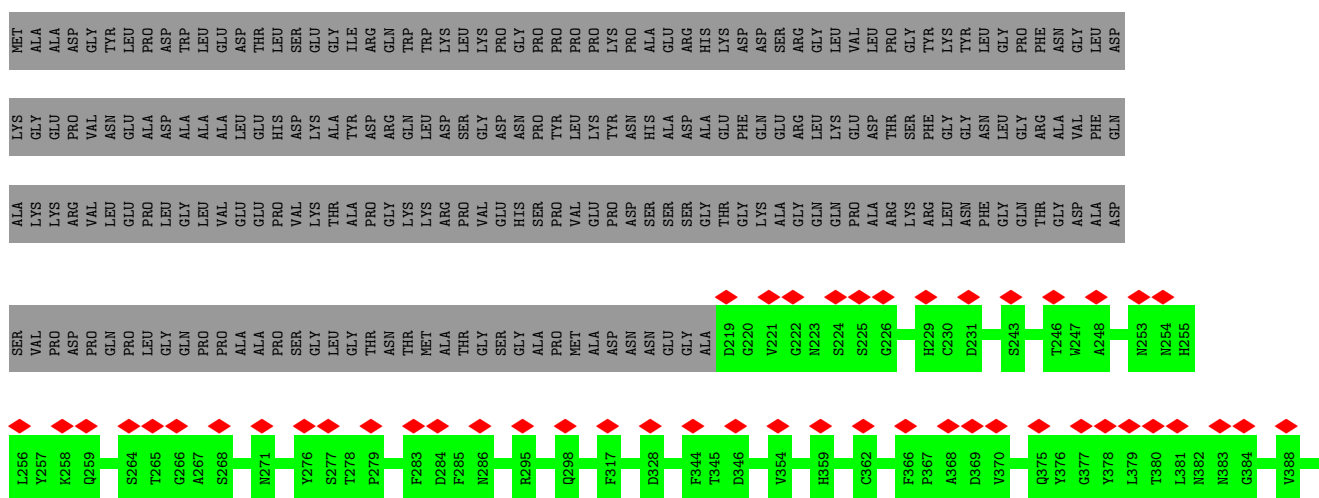
ALA LYS LYS ARG VAL LEU PRO LEU LEU VAL VAL GLU PRO VAL VAL THR ALA ALA GLY LYS LYS LYS ARG PRO VAL VAL HIS SER PRO SER VAL MET MET ALA ASP ASN ALA ALA D219 G220 V221 G222 S225 G226 H229 C230 D231 R245 T246 W247 A248 M253 N254 H255 L256 Y257

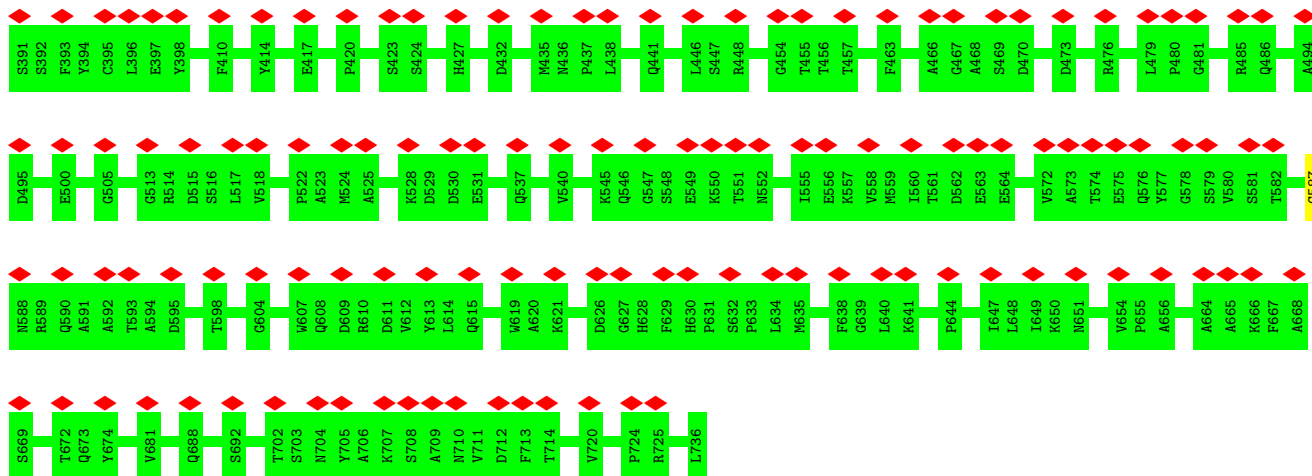


• Molecule 1: Capsid protein VP1

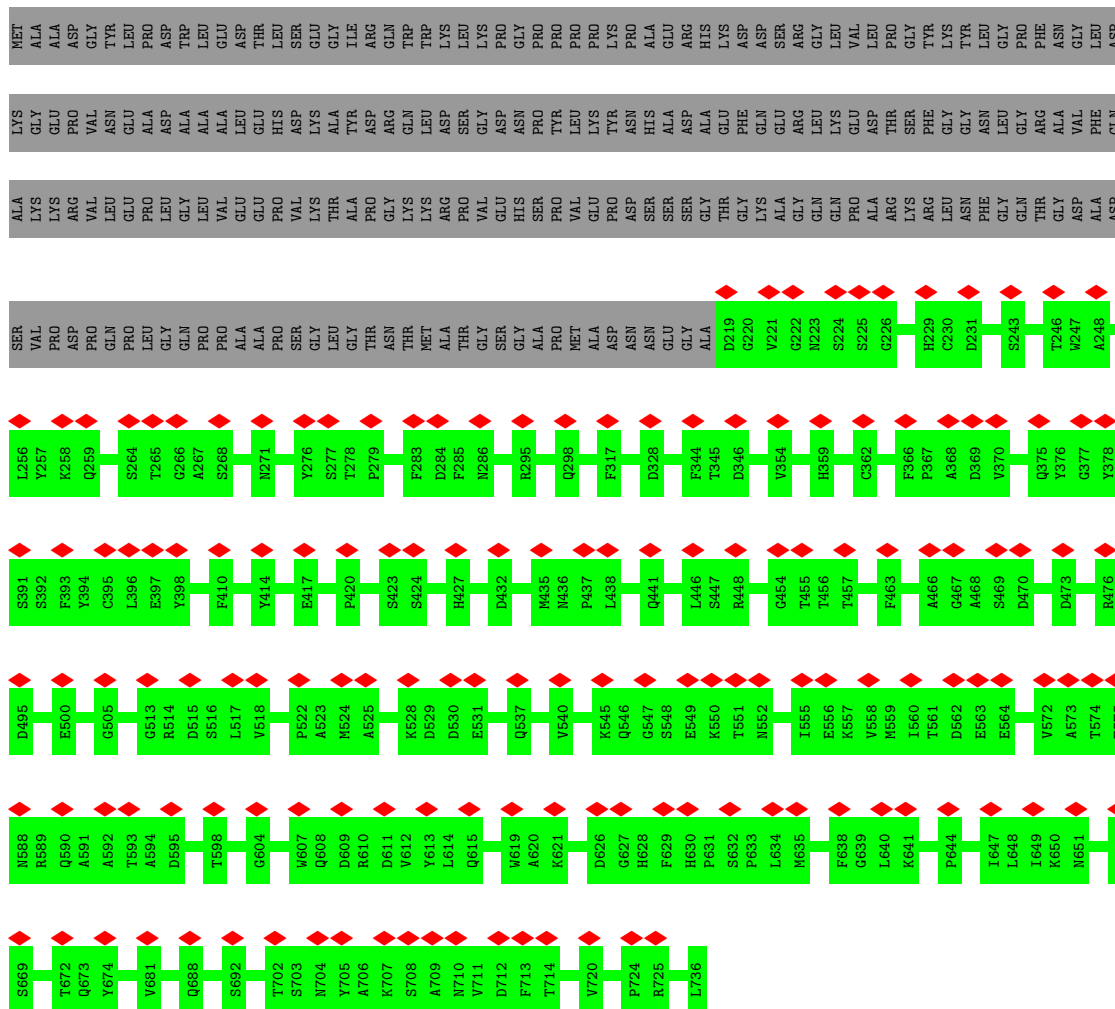


• Molecule 1: Capsid protein VP1

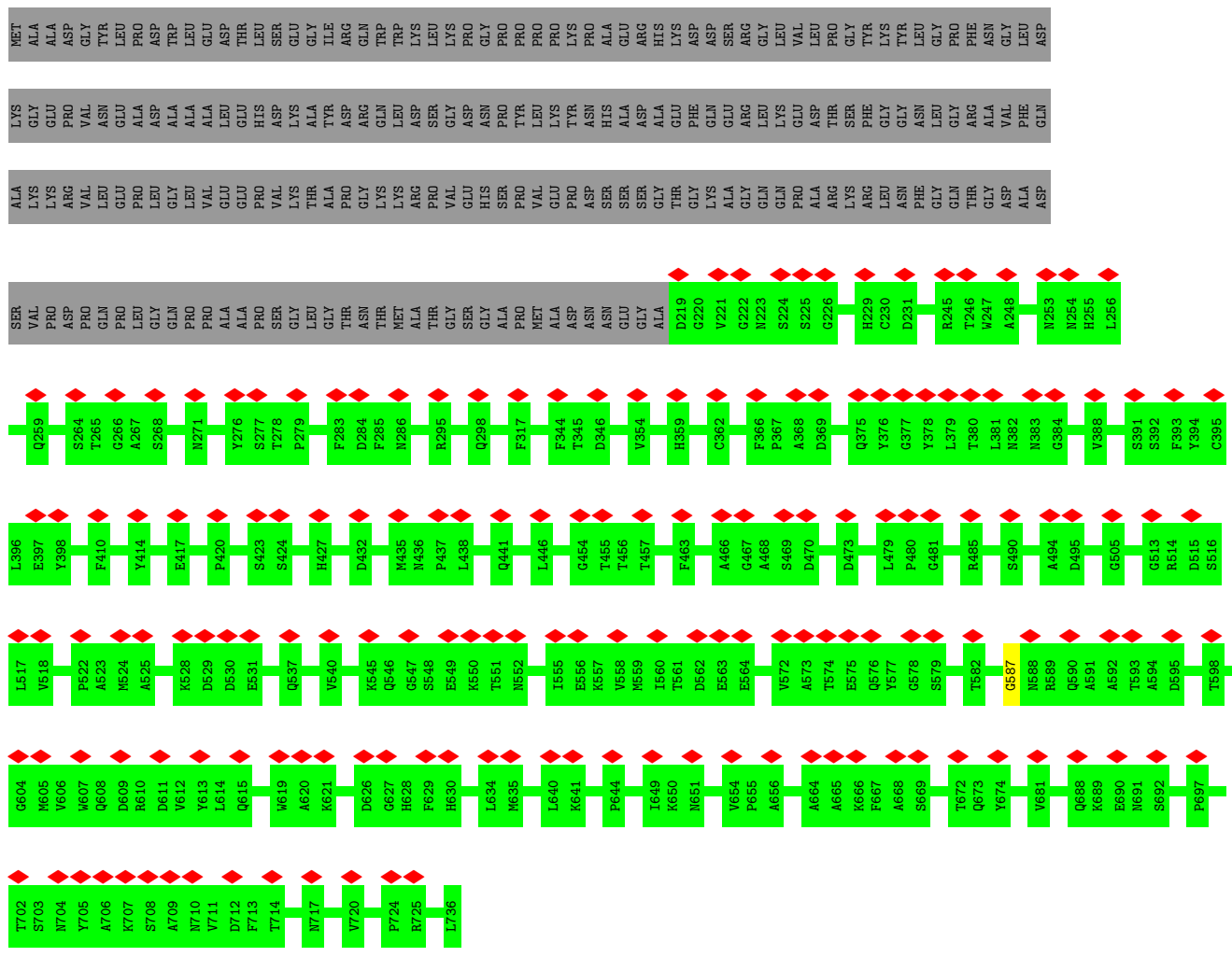




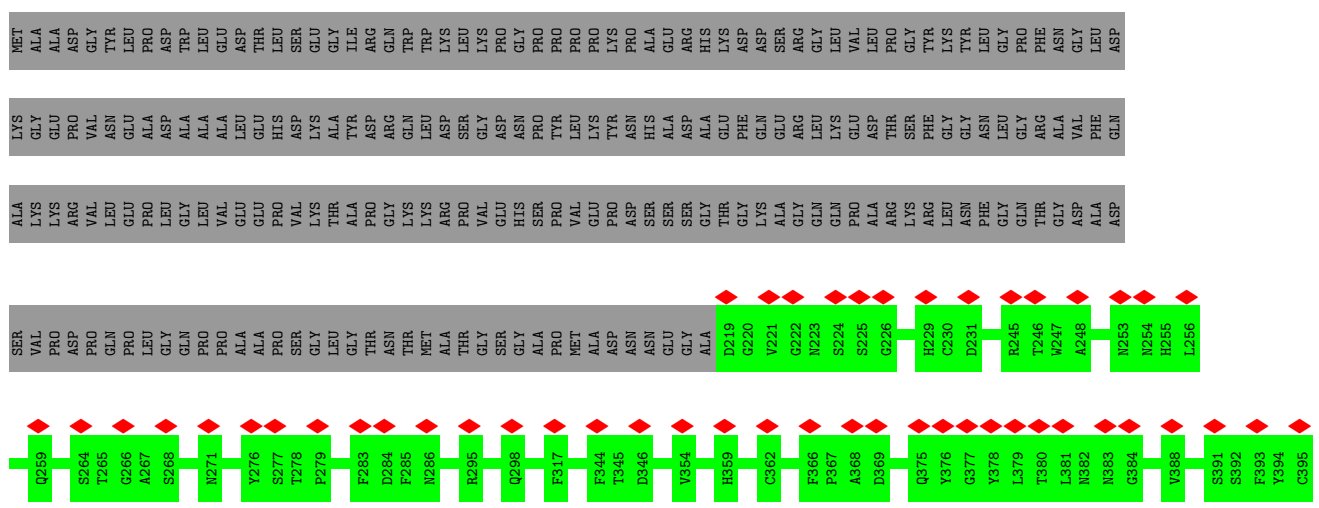
• Molecule 1: Capsid protein VP1

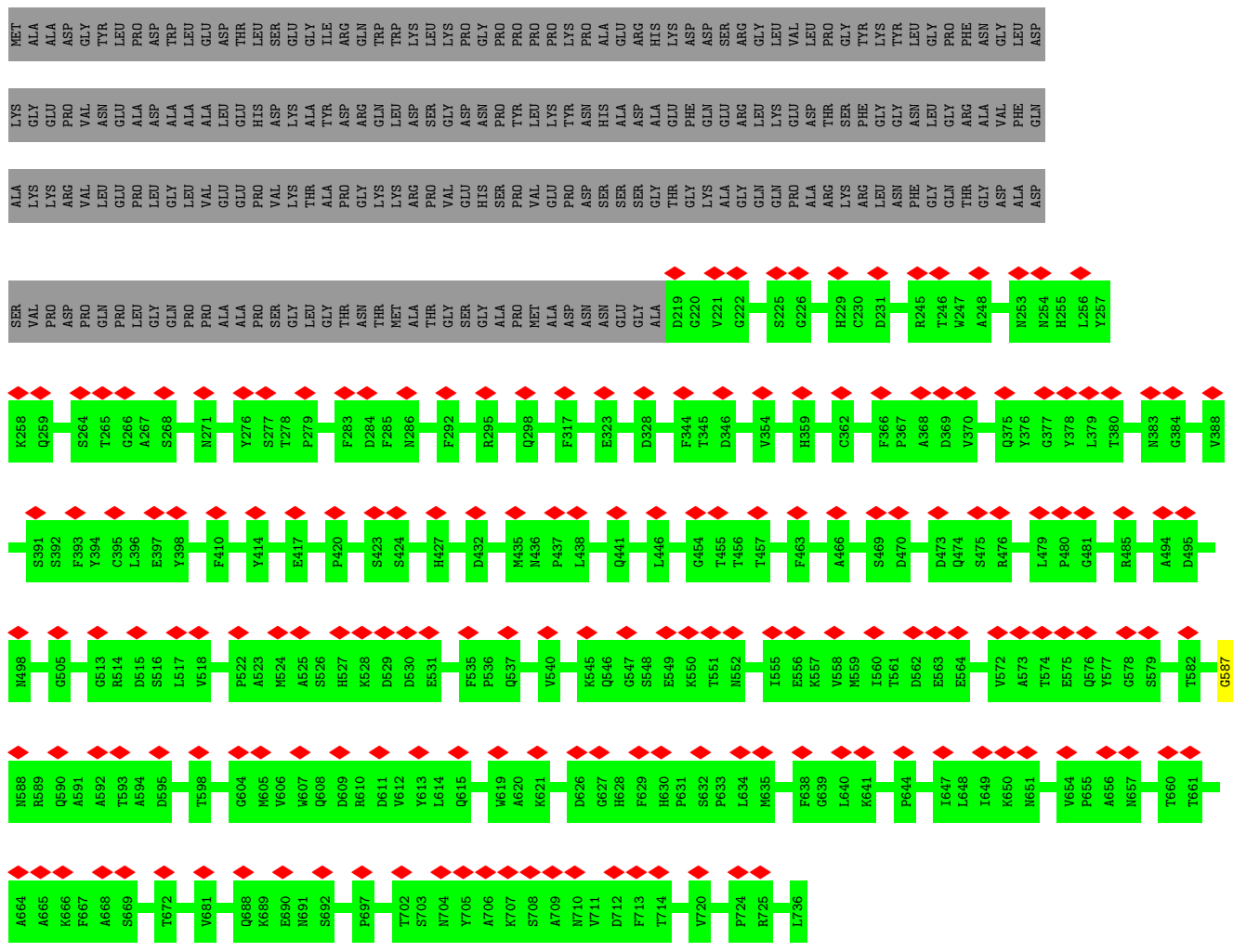


• Molecule 1: Capsid protein VP1

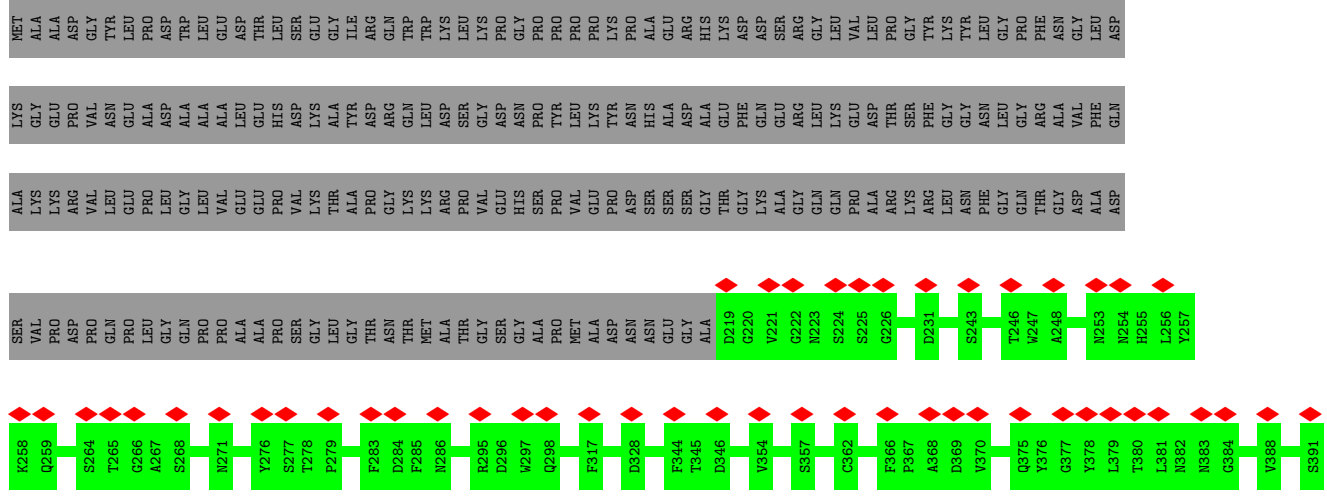


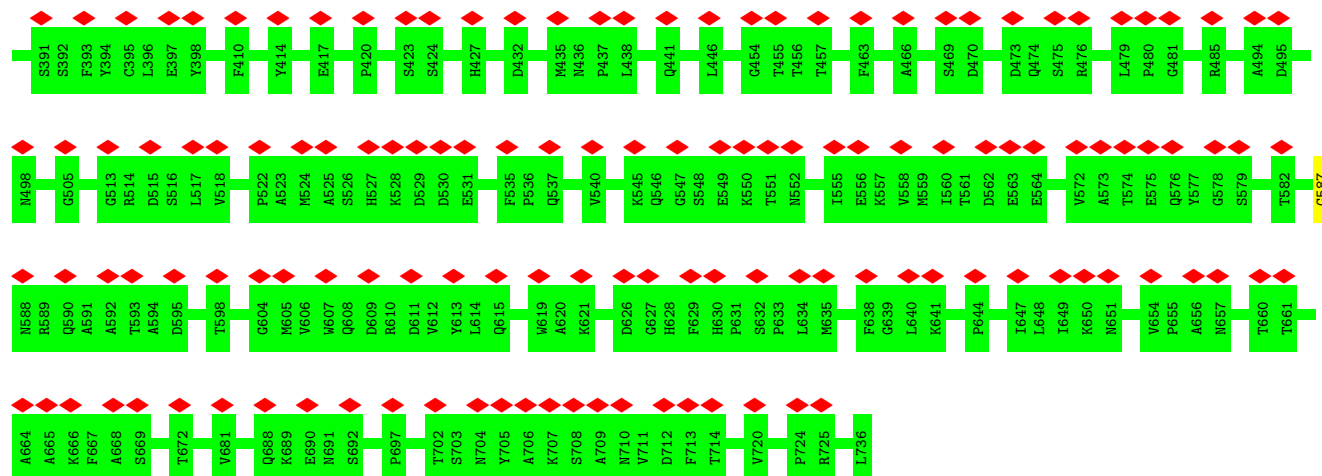
• Molecule 1: Capsid protein VP1





• Molecule 1: Capsid protein VP1





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	24618	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 ($e^-/\text{\AA}^2$)	2	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	DIRECT ELECTRON DE-20 (5k x 3k)	Depositor
Maximum map value	16.777	Depositor
Minimum map value	-8.740	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	1.0	Depositor
Map size (\AA)	379.05, 379.05, 379.05	wwPDB
Map dimensions	399, 399, 399	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	0.95, 0.95, 0.95	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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	0	0.53	0/4265	0.53	0/5814
1	1	0.53	0/4265	0.53	0/5814
1	2	0.53	0/4265	0.53	0/5814
1	3	0.53	0/4265	0.53	0/5814
1	4	0.53	0/4265	0.53	0/5814
1	5	0.53	0/4265	0.53	0/5814
1	6	0.53	0/4265	0.53	0/5814
1	7	0.53	0/4265	0.53	0/5814
1	A	0.53	0/4265	0.53	0/5814
1	B	0.53	0/4265	0.53	0/5814
1	C	0.53	0/4265	0.53	0/5814
1	D	0.53	0/4265	0.53	0/5814
1	E	0.53	0/4265	0.53	0/5814
1	F	0.53	0/4265	0.53	0/5814
1	G	0.53	0/4265	0.53	0/5814
1	H	0.53	0/4265	0.53	0/5814
1	I	0.53	0/4265	0.53	0/5814
1	J	0.53	0/4265	0.53	0/5814
1	K	0.53	0/4265	0.53	0/5814
1	L	0.53	0/4265	0.53	0/5814
1	M	0.53	0/4265	0.53	0/5814
1	N	0.53	0/4265	0.53	0/5814
1	O	0.53	0/4265	0.53	0/5814
1	P	0.53	0/4265	0.53	0/5814
1	Q	0.53	0/4265	0.53	0/5814
1	R	0.53	0/4265	0.53	0/5814
1	S	0.53	0/4265	0.53	0/5814
1	T	0.53	0/4265	0.53	0/5814
1	U	0.53	0/4265	0.53	0/5814
1	V	0.53	0/4265	0.53	0/5814
1	W	0.53	0/4265	0.53	0/5814
1	X	0.53	0/4265	0.53	0/5814
1	Y	0.53	0/4265	0.53	0/5814
1	Z	0.53	0/4265	0.53	0/5814

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	a	0.53	0/4265	0.53	0/5814
1	b	0.53	0/4265	0.53	0/5814
1	c	0.53	0/4265	0.53	0/5814
1	d	0.53	0/4265	0.53	0/5814
1	e	0.53	0/4265	0.53	0/5814
1	f	0.53	0/4265	0.53	0/5814
1	g	0.53	0/4265	0.53	0/5814
1	h	0.53	0/4265	0.53	0/5814
1	i	0.53	0/4265	0.53	0/5814
1	j	0.53	0/4265	0.53	0/5814
1	k	0.53	0/4265	0.53	0/5814
1	l	0.53	0/4265	0.53	0/5814
1	m	0.53	0/4265	0.53	0/5814
1	n	0.53	0/4265	0.53	0/5814
1	o	0.53	0/4265	0.53	0/5814
1	p	0.53	0/4265	0.53	0/5814
1	q	0.53	0/4265	0.53	0/5814
1	r	0.53	0/4265	0.53	0/5814
1	s	0.53	0/4265	0.53	0/5814
1	t	0.53	0/4265	0.53	0/5814
1	u	0.53	0/4265	0.53	0/5814
1	v	0.53	0/4265	0.53	0/5814
1	w	0.53	0/4265	0.53	0/5814
1	x	0.53	0/4265	0.53	0/5814
1	y	0.53	0/4265	0.53	0/5814
1	z	0.53	0/4265	0.53	0/5814
All	All	0.53	0/255900	0.53	0/348840

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	0	0	1
1	1	0	1
1	2	0	1
1	3	0	1
1	4	0	1
1	5	0	1
1	6	0	1
1	7	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	B	0	1
1	C	0	1
1	D	0	1
1	E	0	1
1	F	0	1
1	G	0	1
1	H	0	1
1	I	0	1
1	J	0	1
1	K	0	1
1	L	0	1
1	M	0	1
1	N	0	1
1	O	0	1
1	P	0	1
1	Q	0	1
1	R	0	1
1	S	0	1
1	T	0	1
1	U	0	1
1	V	0	1
1	W	0	1
1	X	0	1
1	Y	0	1
1	Z	0	1
1	a	0	1
1	b	0	1
1	c	0	1
1	d	0	1
1	e	0	1
1	f	0	1
1	g	0	1
1	h	0	1
1	i	0	1
1	j	0	1
1	k	0	1
1	l	0	1
1	m	0	1
1	n	0	1
1	o	0	1
1	p	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	q	0	1
1	r	0	1
1	s	0	1
1	t	0	1
1	u	0	1
1	v	0	1
1	w	0	1
1	x	0	1
1	y	0	1
1	z	0	1
All	All	0	60

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

5 of 60 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	587	GLY	Peptide
1	B	587	GLY	Peptide
1	C	587	GLY	Peptide
1	D	587	GLY	Peptide
1	E	587	GLY	Peptide

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	0	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	1	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	2	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	3	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	4	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	5	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	6	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	7	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	A	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	B	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	C	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	D	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	E	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	F	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	G	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	H	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	I	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	J	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	K	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	L	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	M	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	N	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	O	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	P	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	Q	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	R	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	S	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	T	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	U	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	V	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	W	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	X	516/736 (70%)	507 (98%)	9 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Y	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	Z	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	a	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	b	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	c	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	d	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	e	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	f	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	g	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	h	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	i	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	j	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	k	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	l	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	m	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	n	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	o	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	p	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	q	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	r	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	s	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	t	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	u	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	v	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	w	516/736 (70%)	507 (98%)	9 (2%)	0	100	100
1	x	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	y	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
1	z	516/736 (70%)	506 (98%)	10 (2%)	0	100	100
All	All	30960/44160 (70%)	30384 (98%)	576 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains [i](#)

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	0	457/628 (73%)	457 (100%)	0	100	100
1	1	457/628 (73%)	457 (100%)	0	100	100
1	2	457/628 (73%)	457 (100%)	0	100	100
1	3	457/628 (73%)	457 (100%)	0	100	100
1	4	457/628 (73%)	457 (100%)	0	100	100
1	5	457/628 (73%)	457 (100%)	0	100	100
1	6	457/628 (73%)	457 (100%)	0	100	100
1	7	457/628 (73%)	457 (100%)	0	100	100
1	A	457/628 (73%)	457 (100%)	0	100	100
1	B	457/628 (73%)	457 (100%)	0	100	100
1	C	457/628 (73%)	457 (100%)	0	100	100
1	D	457/628 (73%)	457 (100%)	0	100	100
1	E	457/628 (73%)	457 (100%)	0	100	100
1	F	457/628 (73%)	457 (100%)	0	100	100
1	G	457/628 (73%)	457 (100%)	0	100	100
1	H	457/628 (73%)	457 (100%)	0	100	100
1	I	457/628 (73%)	457 (100%)	0	100	100
1	J	457/628 (73%)	457 (100%)	0	100	100
1	K	457/628 (73%)	457 (100%)	0	100	100
1	L	457/628 (73%)	457 (100%)	0	100	100
1	M	457/628 (73%)	457 (100%)	0	100	100
1	N	457/628 (73%)	457 (100%)	0	100	100
1	O	457/628 (73%)	457 (100%)	0	100	100
1	P	457/628 (73%)	457 (100%)	0	100	100
1	Q	457/628 (73%)	457 (100%)	0	100	100
1	R	457/628 (73%)	457 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	S	457/628 (73%)	457 (100%)	0	100	100
1	T	457/628 (73%)	457 (100%)	0	100	100
1	U	457/628 (73%)	457 (100%)	0	100	100
1	V	457/628 (73%)	457 (100%)	0	100	100
1	W	457/628 (73%)	457 (100%)	0	100	100
1	X	457/628 (73%)	457 (100%)	0	100	100
1	Y	457/628 (73%)	457 (100%)	0	100	100
1	Z	457/628 (73%)	457 (100%)	0	100	100
1	a	457/628 (73%)	457 (100%)	0	100	100
1	b	457/628 (73%)	457 (100%)	0	100	100
1	c	457/628 (73%)	457 (100%)	0	100	100
1	d	457/628 (73%)	457 (100%)	0	100	100
1	e	457/628 (73%)	457 (100%)	0	100	100
1	f	457/628 (73%)	457 (100%)	0	100	100
1	g	457/628 (73%)	457 (100%)	0	100	100
1	h	457/628 (73%)	457 (100%)	0	100	100
1	i	457/628 (73%)	457 (100%)	0	100	100
1	j	457/628 (73%)	457 (100%)	0	100	100
1	k	457/628 (73%)	457 (100%)	0	100	100
1	l	457/628 (73%)	457 (100%)	0	100	100
1	m	457/628 (73%)	457 (100%)	0	100	100
1	n	457/628 (73%)	457 (100%)	0	100	100
1	o	457/628 (73%)	457 (100%)	0	100	100
1	p	457/628 (73%)	457 (100%)	0	100	100
1	q	457/628 (73%)	457 (100%)	0	100	100
1	r	457/628 (73%)	457 (100%)	0	100	100
1	s	457/628 (73%)	457 (100%)	0	100	100
1	t	457/628 (73%)	457 (100%)	0	100	100
1	u	457/628 (73%)	457 (100%)	0	100	100
1	v	457/628 (73%)	457 (100%)	0	100	100
1	w	457/628 (73%)	457 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	x	457/628 (73%)	457 (100%)	0	100	100
1	y	457/628 (73%)	457 (100%)	0	100	100
1	z	457/628 (73%)	457 (100%)	0	100	100
All	All	27420/37680 (73%)	27420 (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. 5 of 855 such sidechains are listed below:

Mol	Chain	Res	Type
1	a	599	GLN
1	i	458	GLN
1	y	335	ASN
1	b	552	ASN
1	a	552	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

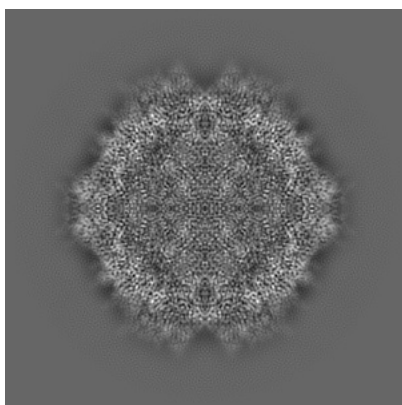
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-7452. These allow visual inspection of the internal detail of the map and identification of artifacts.

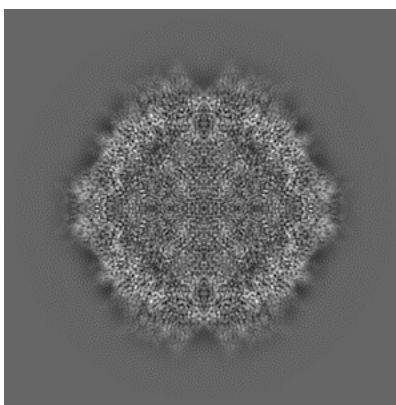
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

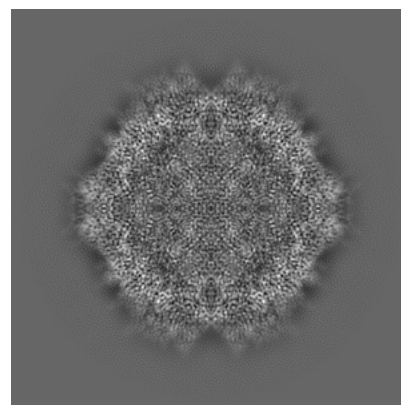
6.1.1 Primary map



X



Y

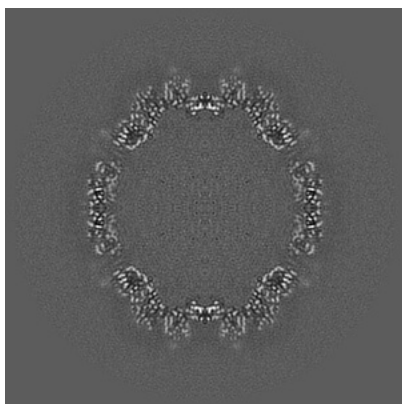


Z

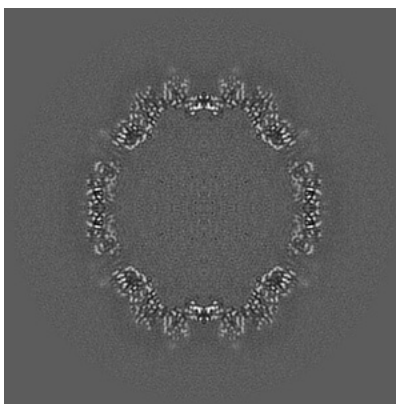
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

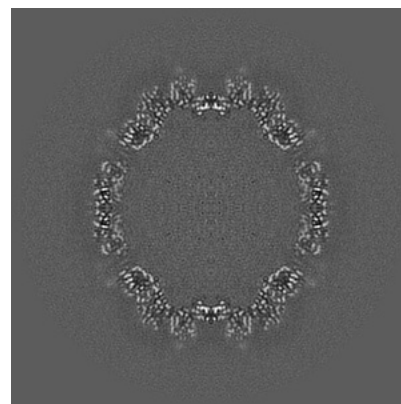
6.2.1 Primary map



X Index: 199



Y Index: 199

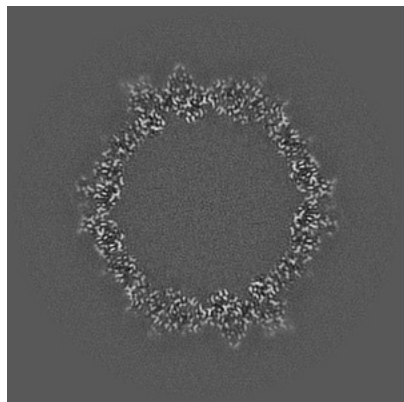


Z Index: 199

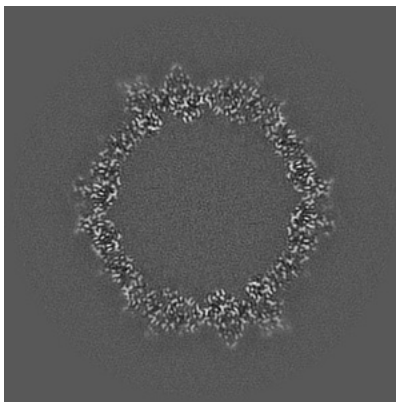
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

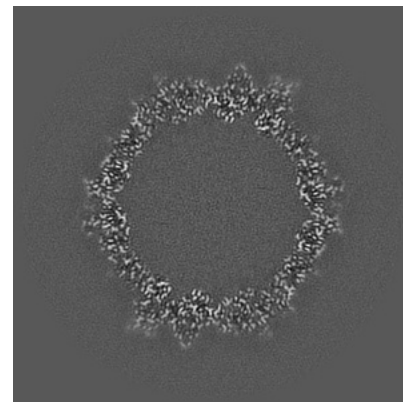
6.3.1 Primary map



X Index: 214



Y Index: 214

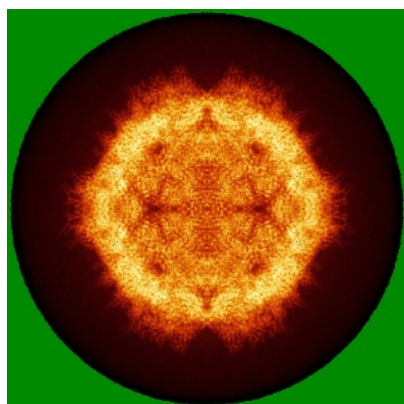


Z Index: 184

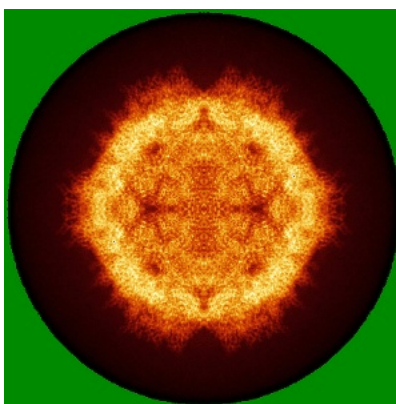
The images above show the largest variance slices of the map in three orthogonal directions.

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

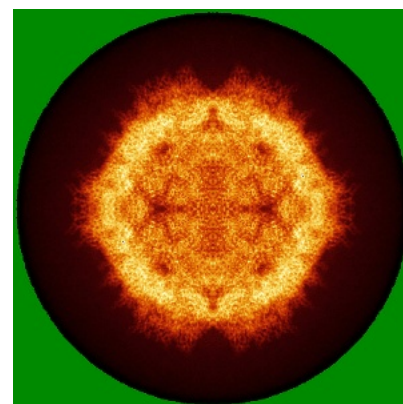
6.4.1 Primary map



X



Y

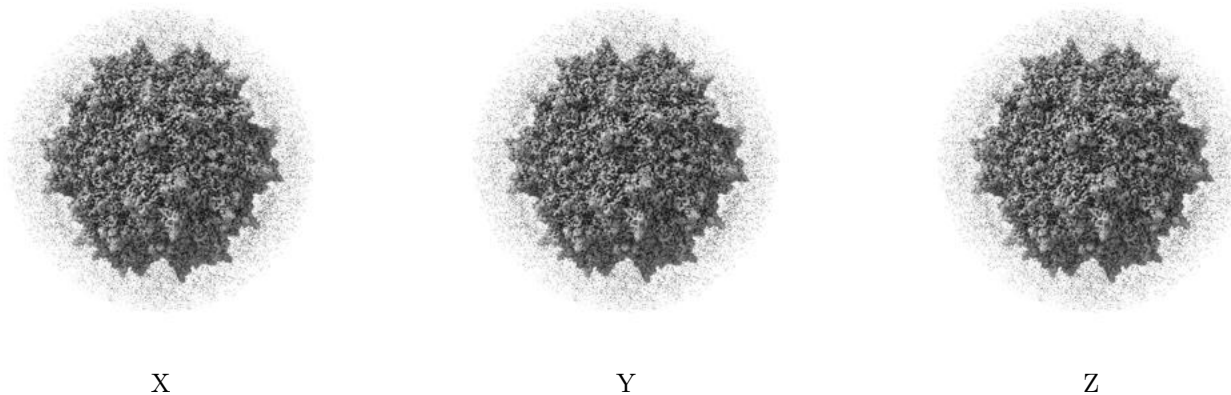


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 1.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

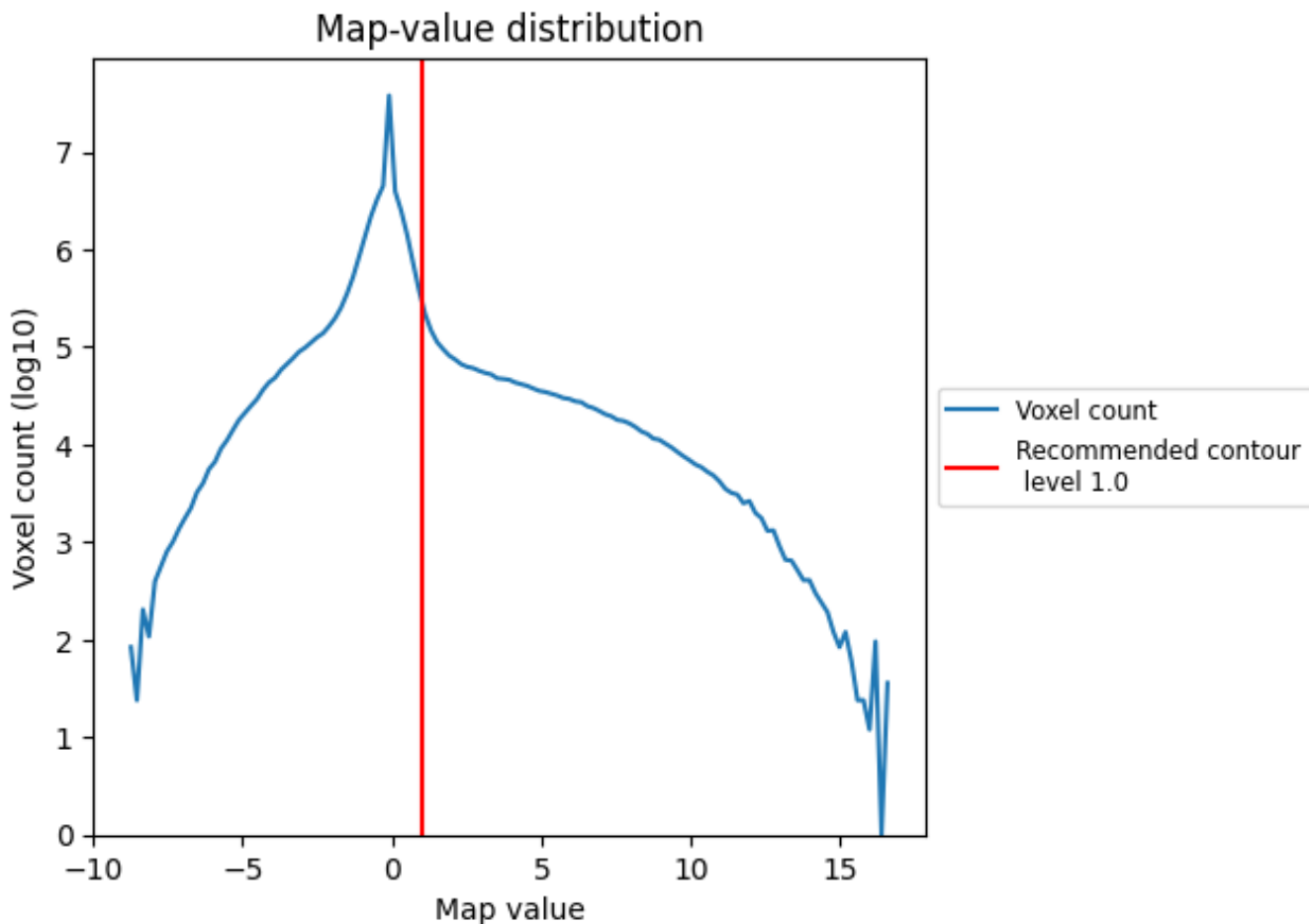
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

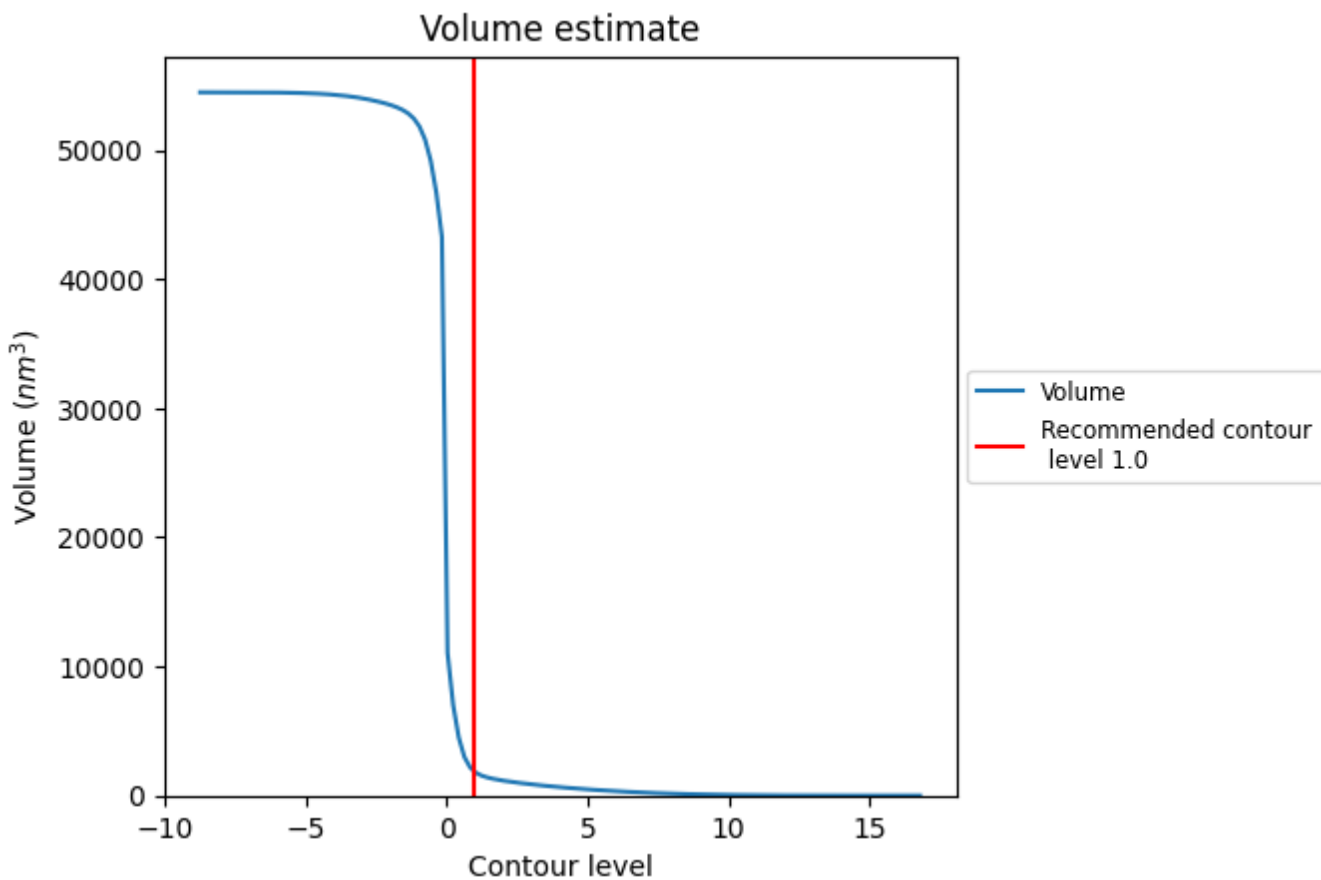
This section contains the results of statistical analysis of the map.

7.1 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.

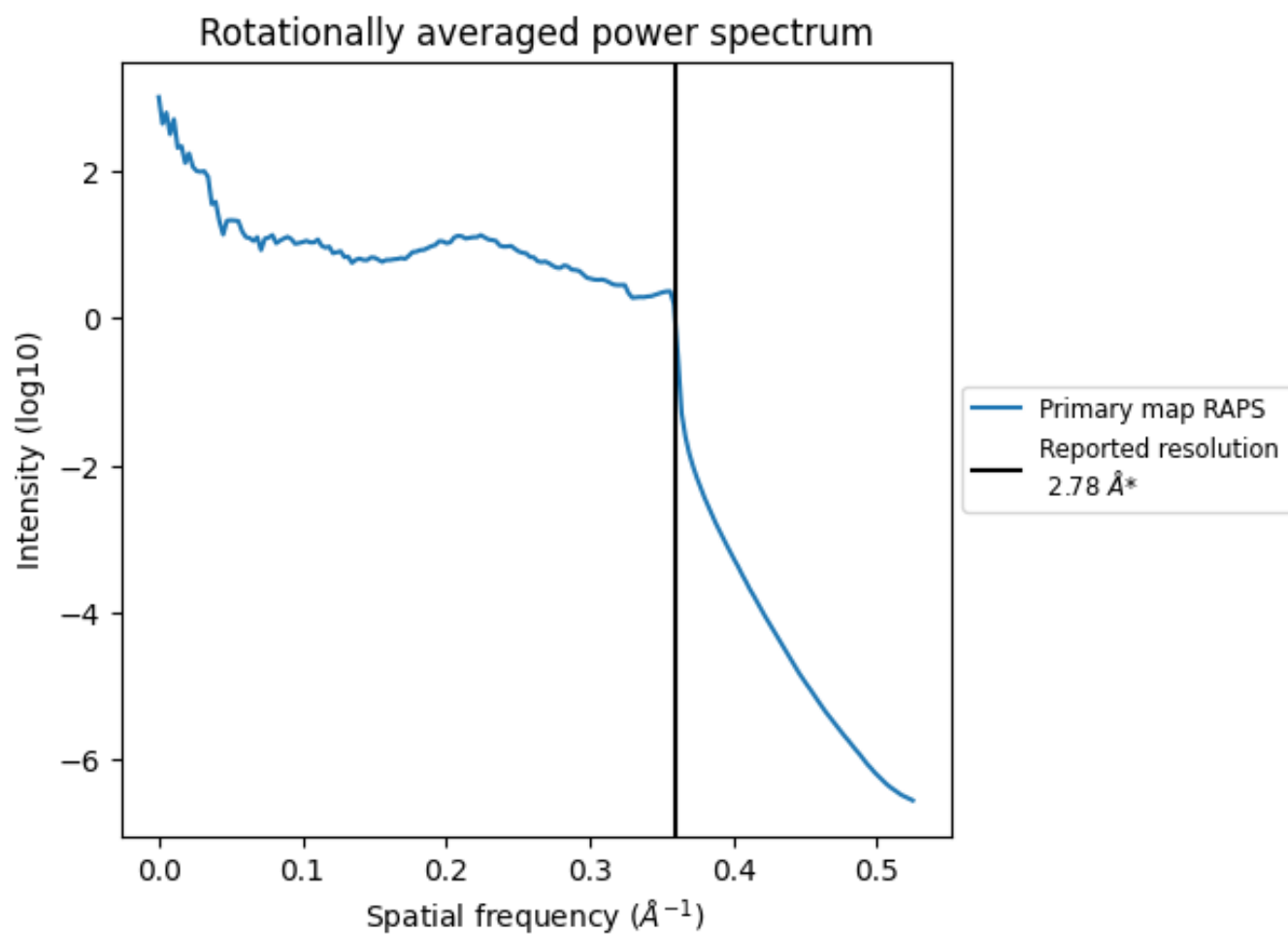
7.2 Volume estimate [\(i\)](#)



The volume at the recommended contour level is 1837 nm^3 ; this corresponds to an approximate mass of 1660 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 [i](#)



*Reported resolution corresponds to spatial frequency of 0.360\AA^{-1}

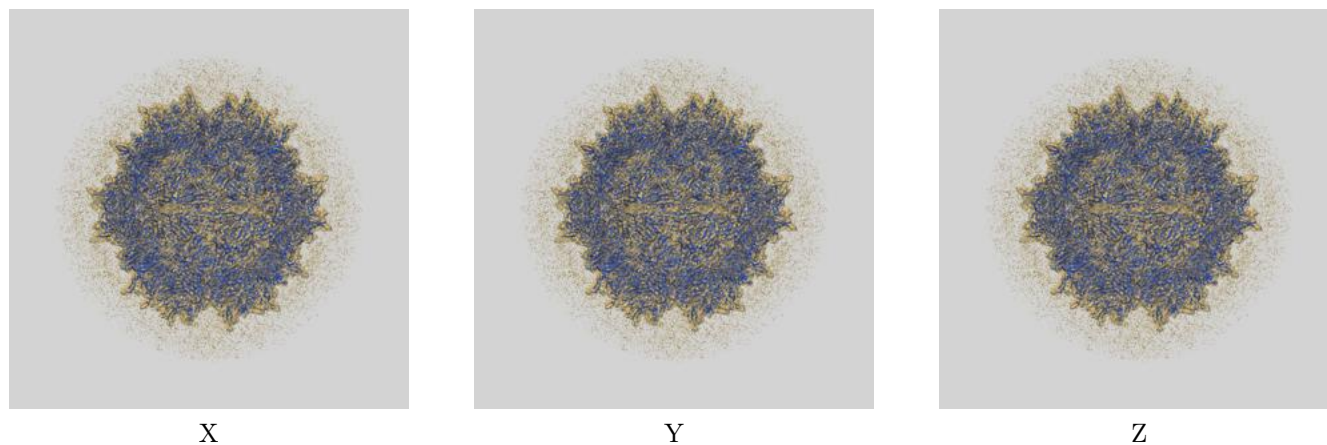
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

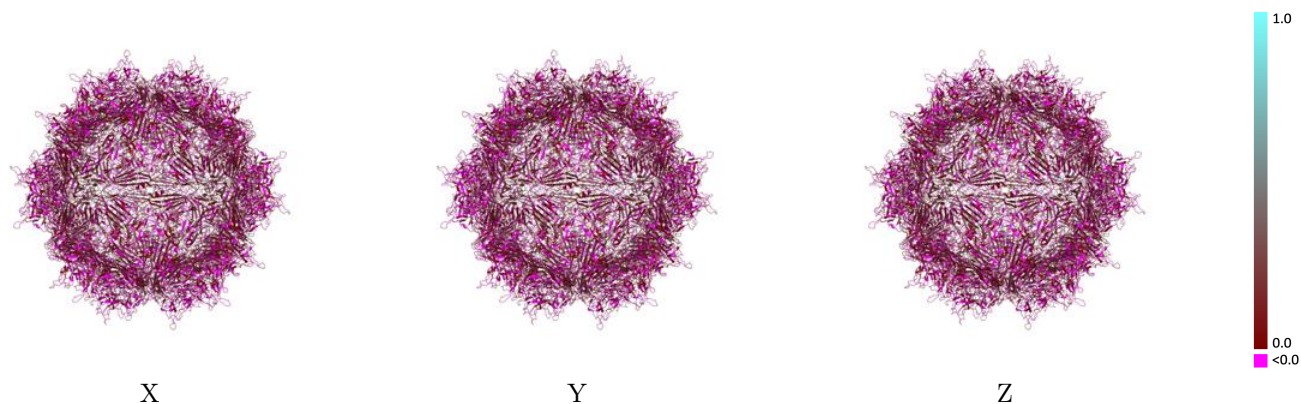
This section contains information regarding the fit between EMDB map EMD-7452 and PDB model 6CBE. Per-residue inclusion information can be found in section 3 on page 17.

9.1 Map-model overlay [i](#)



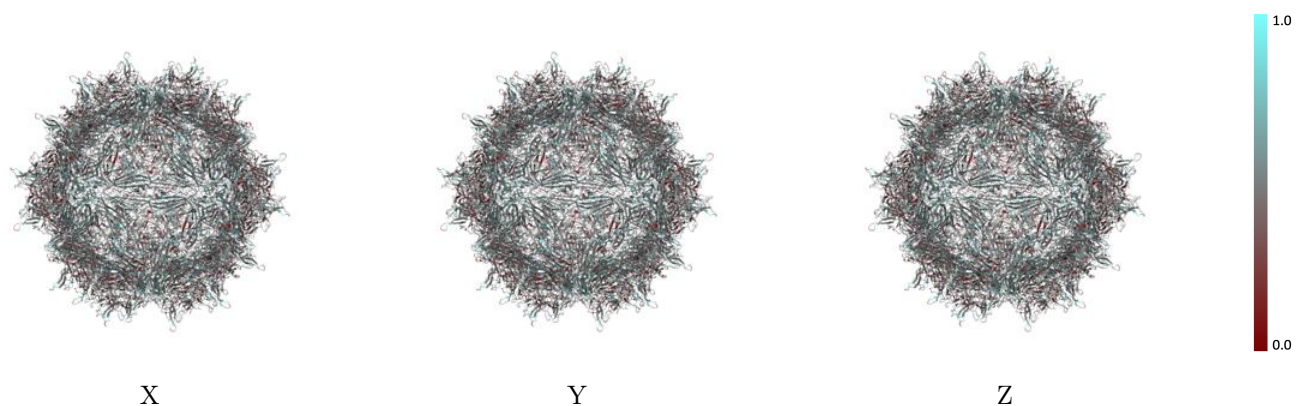
The images above show the 3D surface view of the map at the recommended contour level 1.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



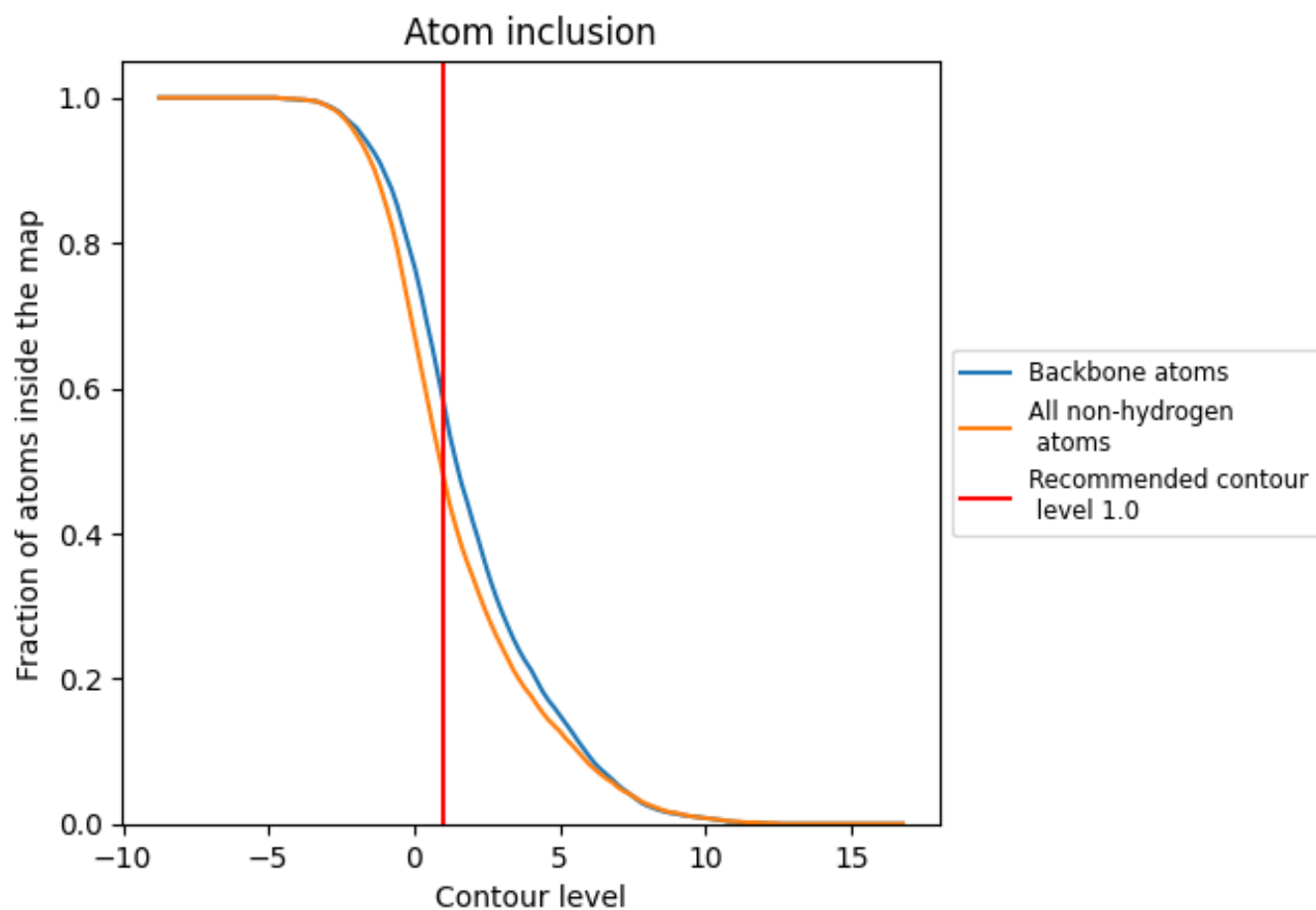
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 [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 (1.0).

9.4 Atom inclusion [i](#)



At the recommended contour level, 58% of all backbone atoms, 48% 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 (1.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	█ 0.4800	█ 0.0960
0	█ 0.4810	█ 0.0980
1	█ 0.4810	█ 0.0960
2	█ 0.4840	█ 0.1060
3	█ 0.4820	█ 0.1020
4	█ 0.4770	█ 0.0940
5	█ 0.4830	█ 0.0820
6	█ 0.4780	█ 0.0990
7	█ 0.4780	█ 0.0970
A	█ 0.4810	█ 0.0930
B	█ 0.4770	█ 0.0910
C	█ 0.4830	█ 0.0880
D	█ 0.4780	█ 0.0870
E	█ 0.4830	█ 0.0890
F	█ 0.4840	█ 0.0970
G	█ 0.4780	█ 0.1000
H	█ 0.4780	█ 0.1000
I	█ 0.4820	█ 0.0970
J	█ 0.4770	█ 0.0990
K	█ 0.4820	█ 0.0990
L	█ 0.4760	█ 0.0930
M	█ 0.4780	█ 0.0940
N	█ 0.4820	█ 0.0970
O	█ 0.4760	█ 0.1040
P	█ 0.4810	█ 0.0920
Q	█ 0.4830	█ 0.0980
R	█ 0.4810	█ 0.1000
S	█ 0.4780	█ 0.1010
T	█ 0.4780	█ 0.1000
U	█ 0.4820	█ 0.1020
V	█ 0.4770	█ 0.1000
W	█ 0.4820	█ 0.1000
X	█ 0.4760	█ 0.0920
Y	█ 0.4810	█ 0.0950
Z	█ 0.4840	█ 0.0980



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Chain	Atom inclusion	Q-score
a	■ 0.4780	■ 0.0790
b	■ 0.4810	■ 0.0850
c	■ 0.4840	■ 0.0940
d	■ 0.4840	■ 0.0950
e	■ 0.4830	■ 0.0890
f	■ 0.4810	■ 0.1000
g	■ 0.4770	■ 0.1080
h	■ 0.4760	■ 0.1070
i	■ 0.4830	■ 0.1020
j	■ 0.4840	■ 0.1050
k	■ 0.4780	■ 0.1040
l	■ 0.4820	■ 0.1050
m	■ 0.4810	■ 0.1070
n	■ 0.4760	■ 0.0960
o	■ 0.4760	■ 0.0870
p	■ 0.4770	■ 0.0900
q	■ 0.4810	■ 0.0910
r	■ 0.4780	■ 0.0980
s	■ 0.4820	■ 0.0950
t	■ 0.4780	■ 0.0780
u	■ 0.4820	■ 0.0780
v	■ 0.4810	■ 0.0830
w	■ 0.4830	■ 0.0950
x	■ 0.4830	■ 0.0900
y	■ 0.4820	■ 0.0960
z	■ 0.4810	■ 0.0980