

wwPDB EM Validation Summary Report (i)

Mar 29, 2022 – 04:14 pm BST

EMDB ID : EMD-13957

Title : Extended H/L (SLPH/SLPL) complex from C. difficile (CD630 strain) fit into

R20291 S-layer negative stain map

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Deposited on : 2021-12-09 Resolution : Not provided

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

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

EMDB validation analysis : 0.0.0.dev97

Validation Pipeline (wwPDB-VP) :

1 Experimental information (i)

Property	Value	Source
EM reconstruction method	CRYSTALLOGRAPHY	Depositor
Imposed symmetry	3D CRYSTAL, $a=80$ Å, $b=80$ Å, $c=160$ Å,	Depositor
	$\alpha=90^{\circ}$, $\beta=90^{\circ}$, $\gamma=100^{\circ}$, space group=Not	
	provided	
Number of images used	Not provided	
Resolution determination method	DIFFRACTION PATTERN/LAYERLINES	Depositor
CTF correction method	Not provided	
Microscope	FEI/PHILIPS CM200FEG	Depositor
Voltage (kV)	200	Depositor
Electron dose $(e^-/\text{Å}^2)$	0.1	Depositor
Minimum defocus (nm)	0.8	Depositor
Maximum defocus (nm)	2.2	Depositor
Magnification	Not provided	
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum map value	213.459	Depositor
Minimum map value	-250.000	Depositor
Average map value	-0.271	Depositor
Map value standard deviation	37.640	Depositor
Recommended contour level	22.1	Depositor
Map size (Å)	321.0, 261.0, 345.3125	wwPDB
Map dimensions	321, 261, 221	wwPDB
Map angles (°)	90.0, 90.0, 100.0	wwPDB
Pixel spacing (Å)	1.0, 1.0, 1.5625	Depositor



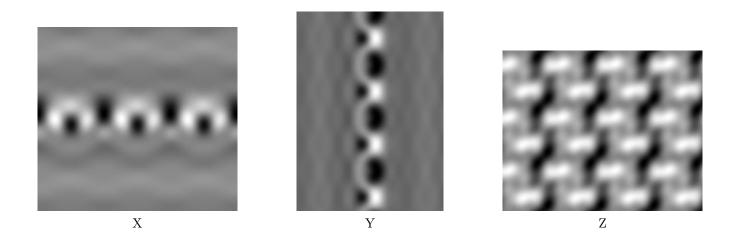
Map visualisation (i) 2

This section contains visualisations of the EMDB entry EMD-13957. 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.

Orthogonal projections (i) 2.1

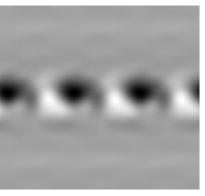
2.1.1Primary map



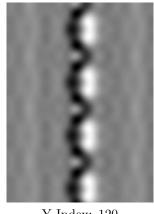
The images above show the map projected in three orthogonal directions.

Central slices (i) 2.2

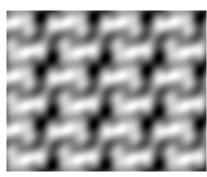
2.2.1Primary map



X Index: 150



Y Index: 120



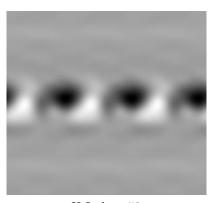
Z Index: 110

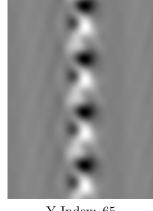


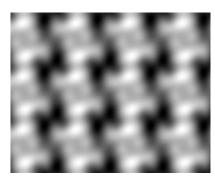
The images above show central slices of the map in three orthogonal directions.

2.3 Largest variance slices (i)

2.3.1 Primary map







X Index: 50

Y Index: 65

Z Index: 118

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

2.4 Orthogonal surface views (i)

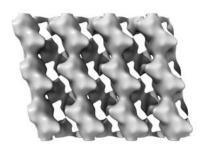
2.4.1 Primary map



X



Υ



Ζ

The images above show the 3D surface view of the map at the recommended contour level 22.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.



2.5 Mask visualisation (i)

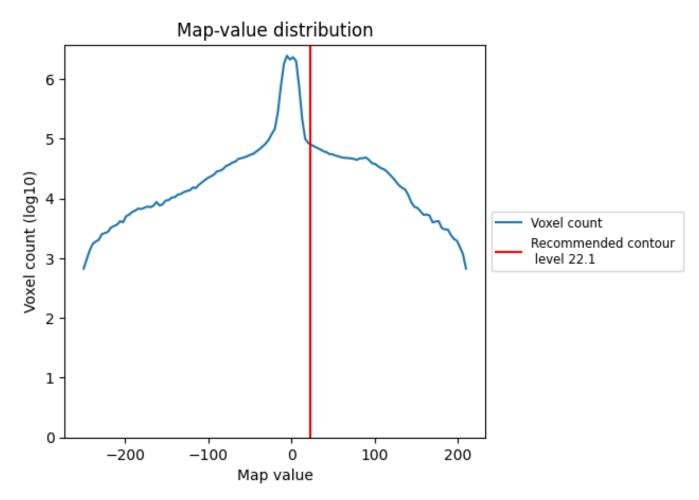
This section was not generated. No masks/segmentation were deposited.



3 Map analysis (i)

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

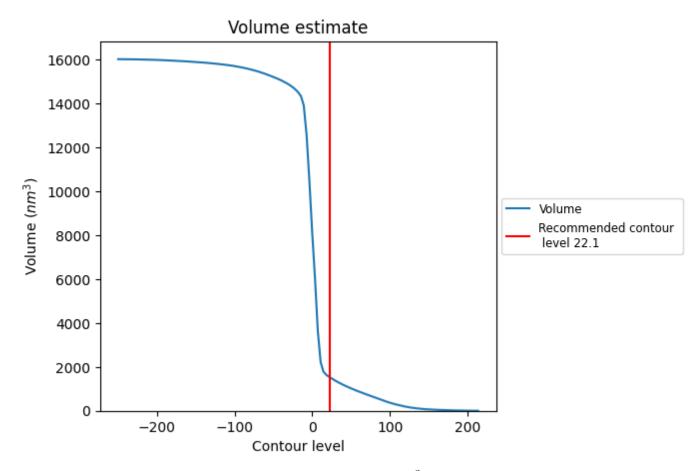
3.1 Map-value distribution (i)



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.



3.2 Volume estimate (i)



The volume at the recommended contour level is $1536~\mathrm{nm^3}$; this corresponds to an approximate mass of $1388~\mathrm{kDa}$.

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.

3.3 Rotationally averaged power spectrum (i)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.



4 Fourier-Shell correlation (i)

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

