

wwPDB EM Validation Summary Report (i)

Apr 16, 2024 – 05:45 am BST

EMDB ID : EMD-13458

Title : Structure of the 70S ribosome with tRNAs in the classical pre-translocation

state and apramycin (C)

Authors: Petrychenko, V.; Peng, B.Z.

Deposited on : 2021-08-24

Resolution : 2.35 Å(reported)

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

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 (i)) were used in the production of this report:

EMDB validation analysis : 0.0.1.dev92Validation Pipeline (wwPDB-VP) : 2.36

1 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	537761	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	30.0	Depositor
Minimum defocus (nm)	0.5	Depositor
Maximum defocus (nm)	1.2	Depositor
Magnification	59000.0	Depositor
Image detector	FEI FALCON III (4k x 4k)	Depositor



2 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-13458. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

2.1 Orthogonal projections (i)

This section was not generated.

2.2 Central slices (i)

This section was not generated.

2.3 Largest variance slices (i)

This section was not generated.

2.4 Orthogonal standard-deviation projections (False-color) (i)

This section was not generated.

2.5 Orthogonal surface views (i)

This section was not generated.

2.6 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)

This section was not generated.

3.2 Volume estimate versus contour level (i)

This section was not generated.

3.3 Rotationally averaged power spectrum (i)

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



4 Fourier-Shell correlation (i)

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

