

Full wwPDB EM Validation Report

Nov 2, 2021 – 02:30 AM EDT

EMDB ID : EMD-25281

Title: Tertiary structure of an individual particle of self-folding RNA polymer (par-

ticle #045)

Deposited on : 2021-10-30

Resolution : 25.10 Å(reported)

This is a Full wwPDB EM Validation Report.

This report is produced by the wwPDB biocuration pipeline after annotation of the structure.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
https://www.wwpdb.org/validation/2017/EMTomogramValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The following versions of software and data (see references (1)) were used in the production of this report:

EMDB validation analysis : 0.0.0.dev97 Validation Pipeline (wwPDB-VP) : 2.23.2

1 Experimental information (i)

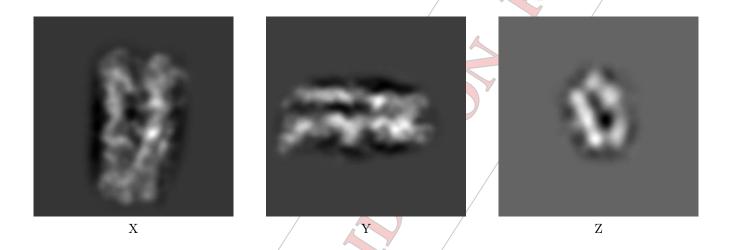
Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	POINT, Not provided	
Number of tilted images used	21	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE	Depositor
	CORRECTION; The Contrast Transfer	
	Function (CTF) was determined by Gctf and	
	then corrected by TOMOCTF.	
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	8	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	81000	Depositor
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum voxel value	5,525	Depositor
Minimum voxel value	-1.983	Depositor
Average voxel value	0.026	Depositor
Voxel value standard deviation	0.331	Depositor
Recommended contour level	1.0	Depositor
Tomogram size (Å)	240.64, 240.64, 240.64	wwPDB
Tomogram dimensions	128, 128, 128	wwPDB
Tomogram angles (°)	90.0, 90.0, 90.0	wwPDB
Grid spacing (Å)	1.88, 1.88, 1.88	Depositor



2 Tomogram visualisation (i)

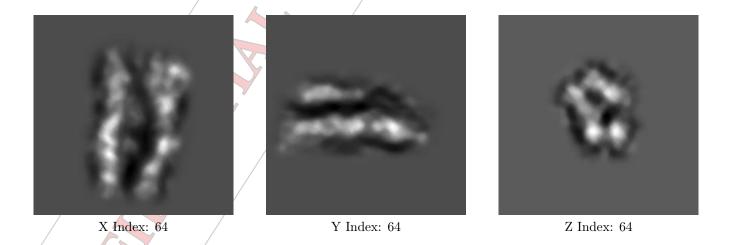
This section contains visualisations of the EMDB entry EMD-25281. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections (i)



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

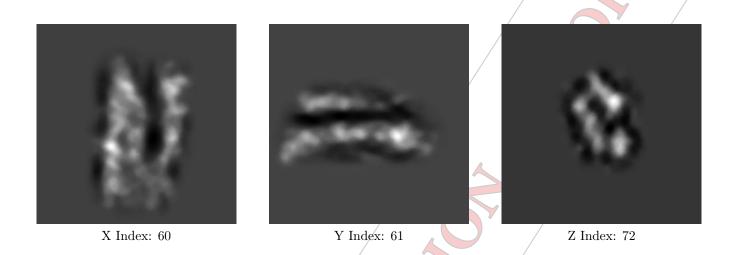
2.2 Central slices (i



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



2.3 Largest variance slices (i)



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

2.4 Mask visualisation (i)

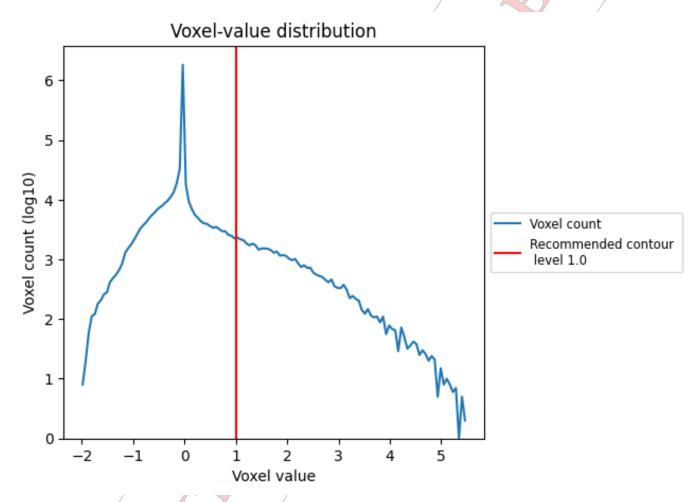
This section was not generated. No masks/segmentation were deposited.



3 Tomogram analysis (i)

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

3.1 Voxel-value distribution (i)



The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.

