

Full wwPDB EM Validation Report

Nov 1, 2021 – 09:07 PM EDT

EMDB ID : EMD-25277

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

ticle #040)

Deposited on : 2021-10-30

Resolution : 27.00 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 (i)) 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)

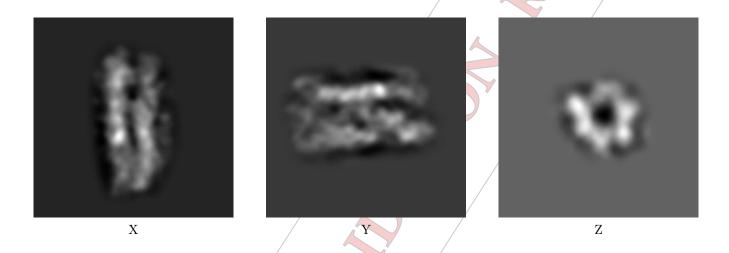
| Property | Value | Source |
|----------------------------------|---|-----------|
| EM reconstruction method | TOMOGRAPHY | Depositor |
| Imposed symmetry | POINT, Not provided | |
| Number of tilted images used | 21 | Depositor |
| Resolution determination method | FSC 0.143 CUT-OFF | Depositor |
| 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 | 4.800 | Depositor |
| Minimum voxel value | / 2.742 | Depositor |
| Average voxel value | 0.028 | Depositor |
| Voxel value standard deviation | 0.312 | 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)

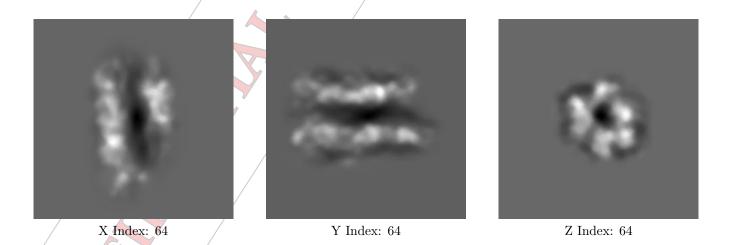
This section contains visualisations of the EMDB entry EMD-25277. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections (i)



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

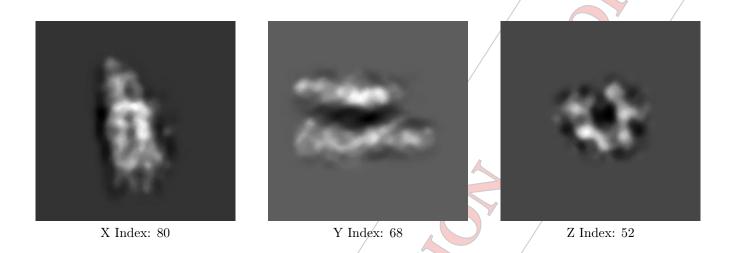
2.2 Central slices



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)

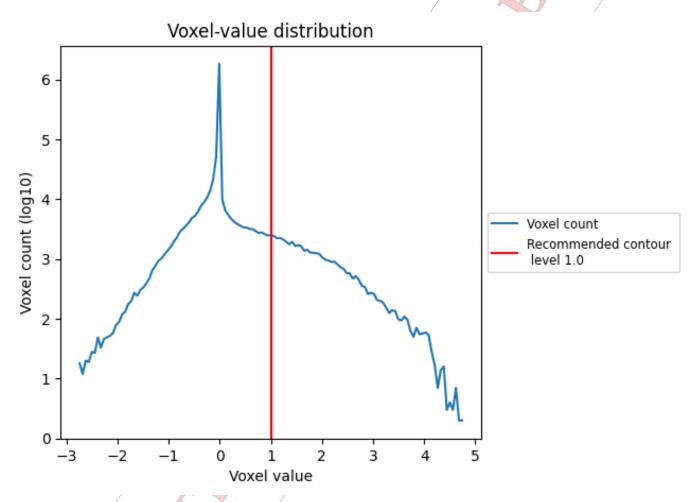
This section was not generated. No masks/segmentation were deposited.



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.

