

## Full wwPDB EM Validation Report

Nov 2, 2021 – 05:04 PM EDT

EMDB ID : EMD-25282

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

ticle #047)

Deposited on : 2021-10-30

Resolution : 25.90 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)

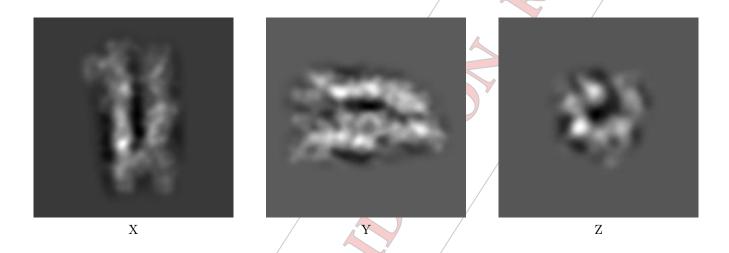
| Property                         | Value                                     | Source    |
|----------------------------------|---|-----------|
| EM reconstruction method         | TOMOGRAPHY                                | Depositor |
| Imposed symmetry                 | POINT, Not provided                       |           |
| 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              | 5.449                                     | Depositor |
| Minimum voxel value              | -2.159                                    | Depositor |
| Average voxel value              | 0.025                                     | Depositor |
| Voxel value standard deviation   | 0.303                                     | Depositor |
| Recommended contour level        | 1.1                                       | 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)

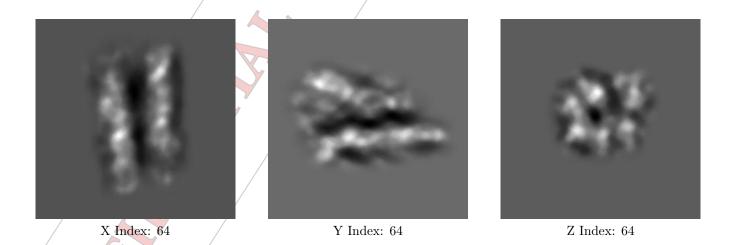
This section contains visualisations of the EMDB entry EMD-25282. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

#### 2.1 Orthogonal projections (i)



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

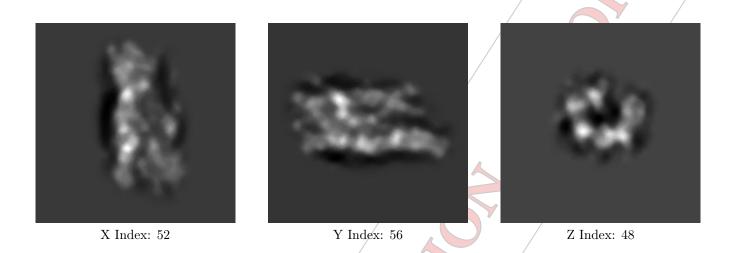
### 2.2 Central slices



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)

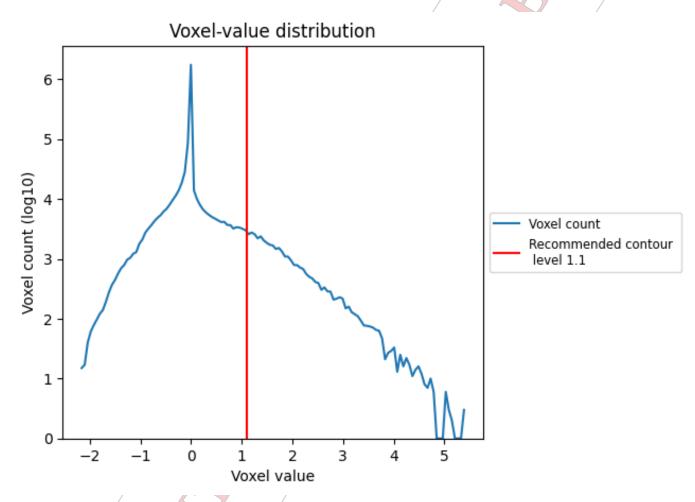
This section was not generated. No masks/segmentation were deposited.



## 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.

