



## wwPDB EM Validation Summary Report ⓘ

Apr 15, 2025 – 10:28 am BST

EMDB ID : EMD-19453  
Title : Human mitochondrial RNase Z complex with ELAC2-D550N catalytic mutant  
and tRNA-Tyr precursor (Composite model)  
Authors : Bhatta, A.; Yu, R.D.; Kuhle, B.; Hillen, H.S.  
Deposited on : 2024-01-22  
Resolution : 2.93 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMMapValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev117  
Validation Pipeline (wwPDB-VP) : 2.42

# 1 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	Not Provided	
Number of particles used	57585	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 ( $e^-/\text{\AA}^2$ )	40.0	Depositor
Minimum defocus (nm)	0.5	Depositor
Maximum defocus (nm)	2.5	Depositor
Magnification	105000.0	Depositor
Image detector	GATAN K3 (6k x 4k)	Depositor

## 2 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-19453. 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.

### 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 ⓘ

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

#### 3.1 Map-value distribution ⓘ

This section was not generated.

#### 3.2 Volume estimate versus contour level ⓘ

This section was not generated.

#### 3.3 Rotationally averaged power spectrum ⓘ

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

## 4 Fourier-Shell correlation

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