



Full wwPDB EM Validation Report ⓘ

May 27, 2024 – 06:26 PM EDT

PDB ID : 5K7R
EMDB ID : EMD-8220
Title : MicroED structure of trypsin at 1.7 Å resolution
Authors : de la Cruz, M.J.; Hattne, J.; Shi, D.; Seidler, P.; Rodriguez, J.; Reyes, F.E.;
Sawaya, M.R.; Cascio, D.; Eisenberg, D.; Gonen, T.
Deposited on : 2016-05-26
Resolution : 1.70 Å(reported)
Based on initial model : 2PTN

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

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

EMDB validation analysis : **FAILED**
MolProbity : **FAILED**
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : **FAILED**
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36.2

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON CRYSTALLOGRAPHY

The reported resolution of this entry is 1.70 Å.

There are no overall percentile quality scores available for this entry.

ENTRY-COMPOSITION INFOmissingINFO

SEQUENCE-PLOTS INFOmissingINFO

2 Experimental information

| Property | Value | Source |
|--------------------------------------|--|-----------|
| EM reconstruction method | CRYSTALLOGRAPHY | Depositor |
| Imposed symmetry | 3D CRYSTAL, $a=53.12$ Å, $b=56.08$ Å, $c=64.38$ Å, $\alpha=90^\circ$, $\beta=90^\circ$, $\gamma=90^\circ$, space group=P 21 21 21 | Depositor |
| Number of images used | Not provided | |
| Resolution determination method | DIFFRACTION PATTERN/LAYERLINES | Depositor |
| CTF correction method | NONE | Depositor |
| Microscope | FEI TECNAI F20 | Depositor |
| Voltage (kV) | 200 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 0.004 | Depositor |
| Minimum defocus (nm) | Not provided | |
| Maximum defocus (nm) | Not provided | |
| Magnification | Not provided | |
| Image detector | TVIPS TEMCAM-F416 (4k x 4k) | Depositor |

3 Model quality [i](#)

3.1 Standard geometry [i](#)

MolProbity failed to run properly - this section is therefore empty.

3.2 Too-close contacts [i](#)

MolProbity failed to run properly - this section is therefore empty.

3.3 Torsion angles [i](#)

3.3.1 Protein backbone [i](#)

MolProbity failed to run properly - this section is therefore empty.

3.3.2 Protein sidechains [i](#)

MolProbity failed to run properly - this section is therefore empty.

3.3.3 RNA [i](#)

MolProbity failed to run properly - this section is therefore empty.

3.4 Non-standard residues in protein, DNA, RNA chains [i](#)

validation-pack failed to run properly - this section is therefore empty.

3.5 Carbohydrates [i](#)

validation-pack failed to run properly - this section is therefore empty.

3.6 Ligand geometry [i](#)

validation-pack failed to run properly - this section is therefore empty.

3.7 Other polymers [i](#)

validation-pack failed to run properly - this section is therefore empty.

3.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.