



## wwPDB EM Validation Summary Report ⓘ

Mar 12, 2025 – 01:28 am GMT

EMDB ID : EMD-51000  
Title : Circularly permuted lumazine synthase twisted tube with 18 Angstrom gap  
between double strands  
Authors : Koziej, L.; Azuma, Y.  
Deposited on : 2024-07-12  
Resolution : 2.85 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 : **FAILED**  
Validation Pipeline (wwPDB-VP) : 2.41

# 1 Experimental information

Property	Value	Source
EM reconstruction method	HELICAL	Depositor
Imposed symmetry	HELICAL, twist=57.3°, rise=22.1 Å, axial sym=C1	Depositor
Number of segments used	807640	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	42.44	Depositor
Minimum defocus (nm)	0.9	Depositor
Maximum defocus (nm)	1.5	Depositor
Magnification	105000.0	Depositor
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor