Summary of integrative structure determination of Vimentin intermediate filament tetramer (PDB ID: 9A3R | pdb_00009a3r, PDB-Dev ID: PDBDEV_00000212)

1. Model Composition	
1.1. Entry composition	Vimentin: chain(s) A, B, C, D (466 residues)
1.2. Datasets used for modeling	- 3DEM volume, EMDB: EMD-16844 - 3DEM volume, Not available - Mass Spectrometry data, Not available - De Novo model, Not available - De Novo model, Not available
2. Representation	
2.1. Number of representations	1
2.2. Scale	Atomic
2.3. Number of rigid and flexible segments	0, 4
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	- 1 unique CrossLinkRestraint: DST, 11 crosslinks - 1 unique EM3DRestraint: Molecular dynamics flexible fitting
4. Validation	
4.2. Number of ensembles	0
4.3. Number of models in ensembles	Not applicable
4.4. Number of deposited models	1
4.5. Model precision	Not available
4.6. Data quality	EMD-16844: resolution is 7.20 Å
4.7. Model quality: assessment of atomic segments	- Clashscore: 1.49 - Ramachandran outliers: 54 - Sidechain outliers: 0
4.8. Fit to data used for modeling	- 3DEM q-score(s): 0.00 - 3DEM atom inclusion score(s): 0.00
4.9. Fit to data used for validation	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. 5.1. Method name	Molecular dynamics flexible fitting

5.2. Method type	Molecular dynamics flexible fitting
5.3. Method description	The vimentin dimer starting model was fitted by molecular dynamics flexible fitting to an elongated version of the electron density map EMD-16844. Spatial restraints derived from chemical crosslinking and from an electron density map indicating the position of the vimentin tail domains were applied in the modelling procedure.
5.4. Number of computed models	1
5.5. Software	- AlphaFold (version 2.1.2) - ClusPro (version 2.0) - Namdinator (version Not available) - UCSF Chimera (version 1.15)