

	Overall C6 Reconstruction	Tal-focused C3 reconstruction	RBP-focused reconstruction	FibL-focused reconstruction	FibU-focused reconstruction	
Data Collection						
Microscope			Titan Krios 300 keV			
Detector			Direct Electron DE-20			
Pixel Size (Å)			1.21			
Defocus range (µm)			0.42-4.9			
Reconstruction						
Number of particles	74,294	43,601	66,861	73,384	58,716	
Software	RELION-2.1.0		RELION-3.0-beta-2			
Symmetry	C6	C3	C6	C6	C6	
Final resolution (FSC=0.143, Å)*	3.45	3.96	3.60	3.69	4.14	
Atomic model refinement						
Software			PHENIX v1.15.2; Coot v0.8.9			
Resolution limit (Å)**	3.75	4.08	3.64	3.62	3.85	
Model-map correlation (FSC=0.5, Å)	3.86	4.21	3.89	3.94	4.15	
Proteins included	MTP _U and MTP _L	Dit, Tal, and TMP		RBP	FibL	FibU
Chains	12	12	24	18	12	
Residues	1878	3105	11,418	3222	1464	
Number of atoms						
Protein atoms	28,866	50,376	183,498	50,550	23,916	
Hydrogens	13,956	25,086	89,970	25,008	12,084	
Metal ions	0	0	6	0	0	
Map CC _{box}	0.39	0.52	0.61	0.48	0.59	
Map CC _{mask}	0.79	0.77	0.76	0.77	0.77	
RMS bond length (Å)	0.008	0.007	0.006	0.002	0.002	
RMS bond angles (°)	1.042	1.190	1.118	0.959	1.014	
Validation						
Ramachandran plot (%)						
Favored	93.53	88.77	90.99	86.82	85.69	
Allowed	6.47	11.23	8.96	13.15	14.31	
Outliers	0	0	0.05	0.03	0	
Rotamers outliers (%)	0	1.07	0	0.03	0	
Clashscore	10.39	4.63	4.07	8.88	8.45	
EMRinger score	2.68	1.39	1.49	2.19	2.57	

*Between half-maps resolution reported by Phenix Comprehensive Validation after automated masking

**Between half-maps resolution reported by RELION-2/3 Postprocessing after masking and FSC correction