

Supplemental Data

Structure of the Oligosaccharide Transferase

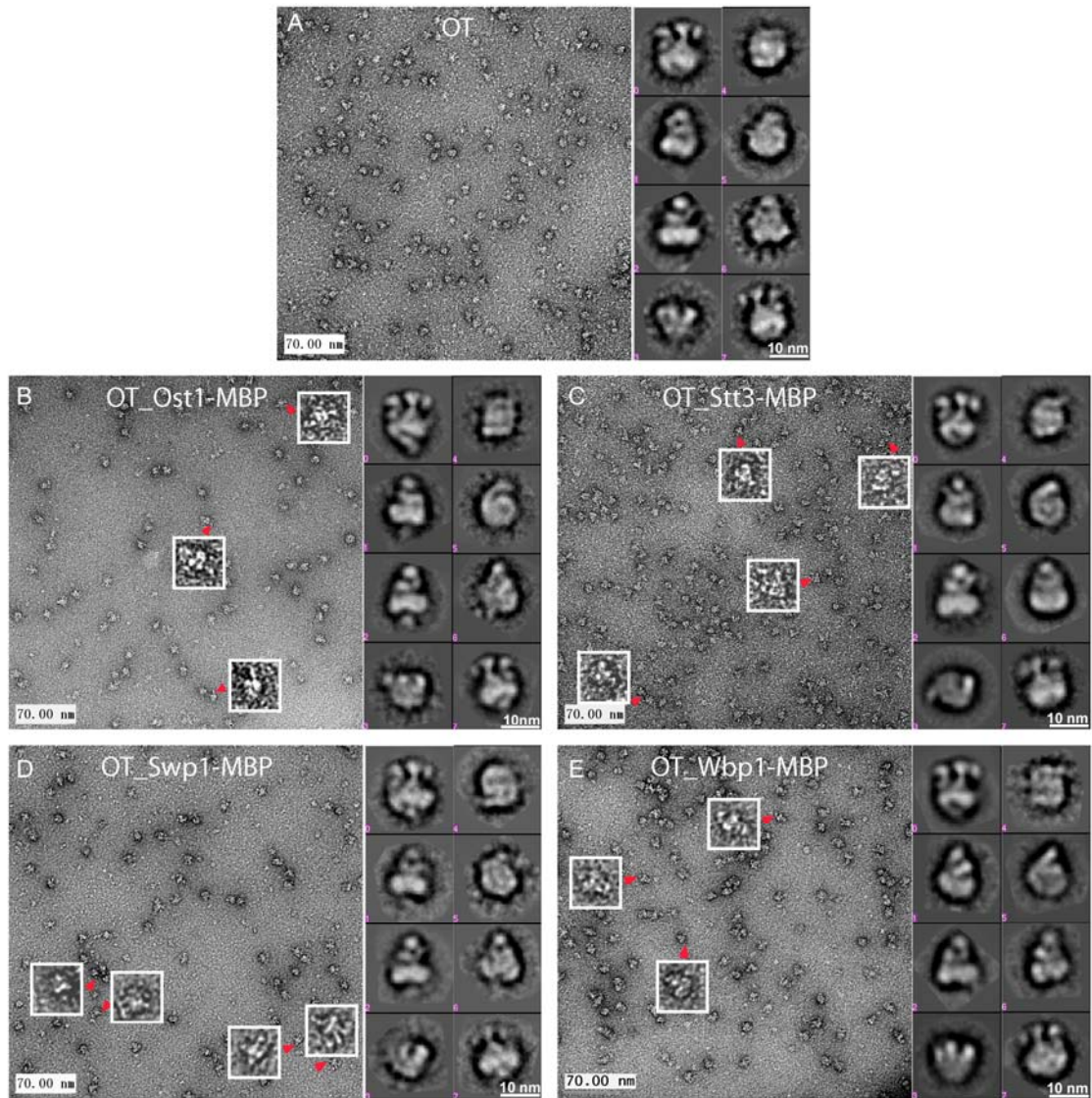
Complex at 12 Å Resolution

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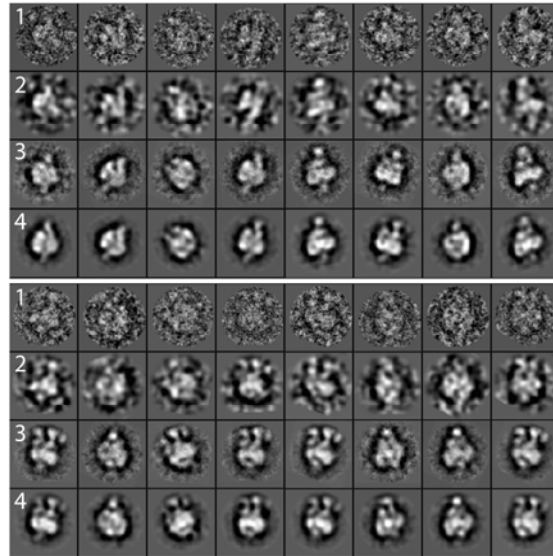
Table S1. Number of the Particles after Center Alignment for the 2D Classification and 3D Reconstruction

Preparation	OT	OT_Ost1p-MBP	OT_Stt3p- MBP	OT_Swp1p-MBP	OT_Wbp1p-MBP
Particle #	11860*	15487*	18851*	12478*	18176*
		19012**			

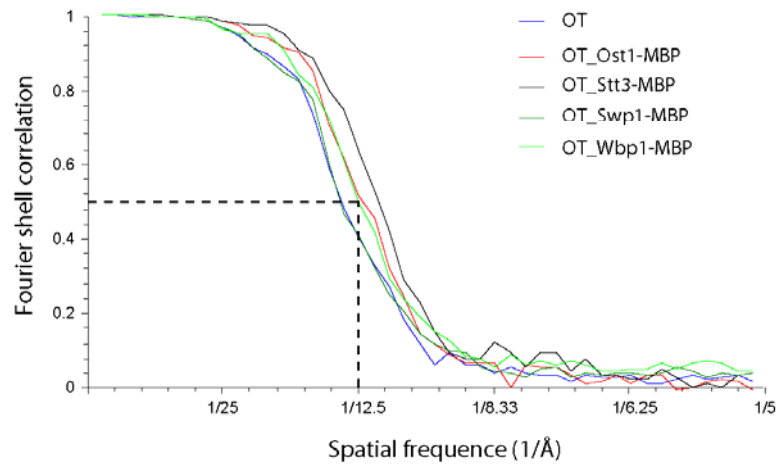
Note: *: Negatively stained particles. **: Cryo particles.



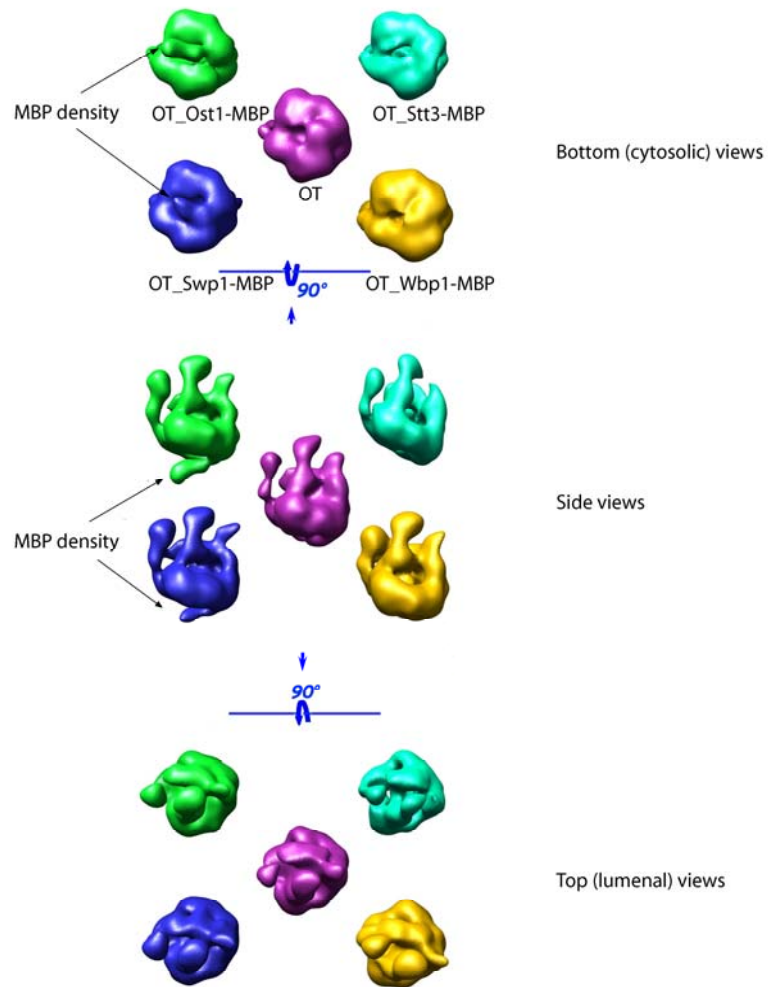
Supplementary Fig. 1. Representative raw EM images of the untagged and the four MBP-tagged OTs in uranyl acetate stain. The sample is labeled on each image. In each MBP-fused OT image, several raw particles with visible MBP density are indicated by red arrowheads and the marked particles are shown as blow-ups. Eight 2D class averages of each data set are displayed to the right of each raw image.



Supplementary Fig. 2. A comparison of selected negatively stained raw particle images with 2D class averages and the reprojections of the 3D model of OT_Ost1p-MBP. In each of the two panels, the first row presents the original raw particles, the second row displays the same raw particles that have been Gaussian low pass filtered to 30Å, the third row shows the corresponding 2D averages, and the last row shows the corresponding reprojections. Note the general agreement of the discernible structural features between these corresponding views.



Supplementary Fig. 3. Fourier shell correlation curves for the five OT structures in negative stain. We note that although the resolution at the threshold of 0.5 is about 13 Å the maps do not resolve the structural details to such a resolution. The resolution is limited to ~ 20 Å by the granularity of the uranyl salt.



Supplementary Fig. 4. Surface rendering of 3D reconstructions of the five negatively-stained OTs. Purple, OT without MBP fusion; green, OT_Ost1p-MBP; blue, OT_Swp1p-MBP; cyan, OT_Stt3p-MBP; yellow, OT_Wbp1p-MBP.