



Supplementary information, Fig. S2: Structural determination of the IFT-A complex.

a, A simplified flowchart of the data process protocol of the IFT-A complex. Focused refinement was performed for two sub-volumes. Sub-volume 1 contains mainly IFT139 and IFT43, and sub-volume 2 contains most of the IFT122 and IFT121 chains. Local resolutions are calculated and shown. **b**, A simplified flowchart of the data process protocol of the IFT-A complex without IFT139. Focused refinement was performed for two sub-volumes. Sub-volume 3 contains mainly most of the IFT122 and IFT121 chains and sub-volume 4 contains most of the IFT144, IFT140 and part of the IFT122 chains. Local resolutions are calculated and shown. **c**, Composed IFT-A map with atomic models docked in. A composed map of the IFT-A complex was calculated in UCSF Chimera by combining sub-volumes 1-4 after aligning with the 3.7-Å full complex map in **a**. The dimensions of the complex are shown. **d**, the FSC curve between the IFT-A model and composite map.