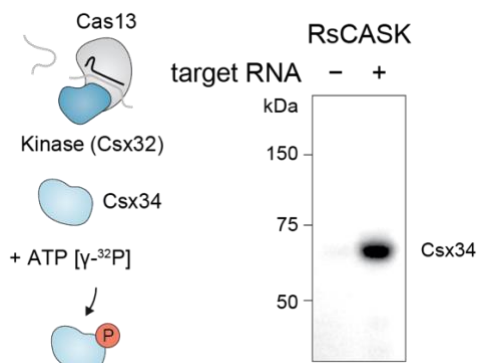
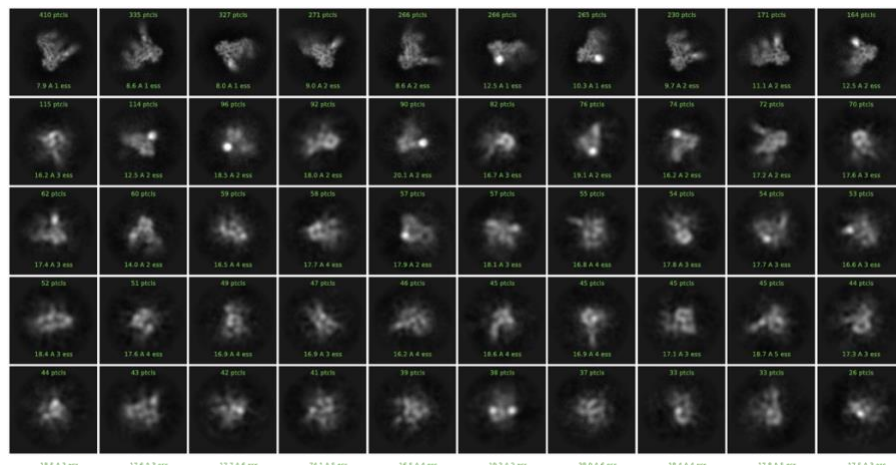


**Figure 1. (A)** The SEC trace of Csx32 with the peak fraction run on SDS-PAGE. **(B)** The SEC trace of Csx34 with the peak fraction run on SDS-PAGE. **(C)** The SEC trace of Csx33 with the peak fraction run on SDS-PAGE. **(D)** The SEC trace of Cas13 with the peak fraction run on SDS-PAGE.



**Figure 2. Kinase assay using purified CASK components in vitro.** Upon the detection of the target RNA, Csx33 phosphorylates the substrate Csx32.



**Figure 3.** The 2D classification of the Cas13-RNA-Csx33 complex taken with a Talos Arctica at MIT.nano.