



**Figure 1. Protein purification and initial EM data of CFTR chloride channel.** **A.** Size exclusion chromatography profile showing CFTR monomer can be readily purified in detergent. **B.** SDS-PAGE gel indicating the deglycosylated CFTR has a molecular weight at around 130 kDa. **C and D.** Negative staining images under different magnifications showing CFTR molecules separate well when in detergent. Different scale bars at the bottom of the image also indicate the right size of the protein. **E.** cryo-EM images of CFTR (magnification: 81000) showing the CFTR particles uniformly distribute in the vitrified ice. **F.** Initial 2D classes of CFTR generated in cryoSPARC showing multiple orientations of the molecule in the cryo-EM images.