

Supplementary Information

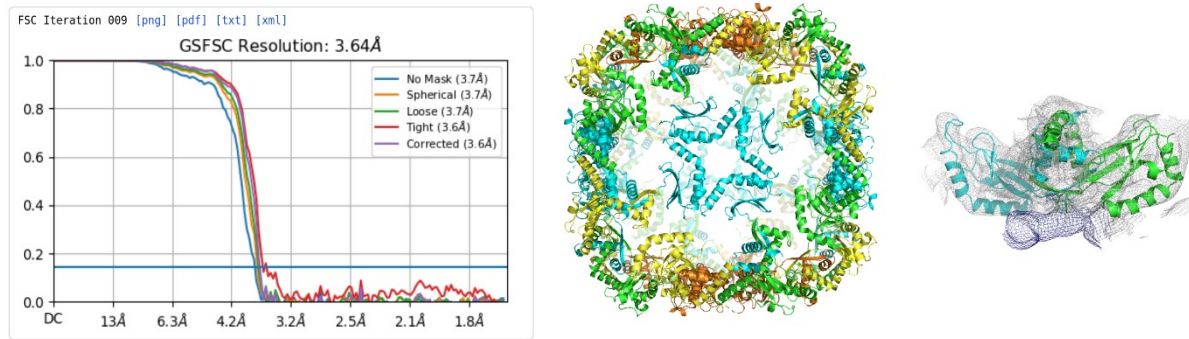


Figure S1. Structure of AbmR 39S complex has been determined by single particle cryo-EM at 3.64Å(left). There are 48 AbmR protein molecules (24 dimers) forming a cage-shaped 39S complex (middle). The RHH motif faces inwards towards the intraluminal side that prevent the DNA binding domain from exposing to DNAs outside of the cage architecture (right).

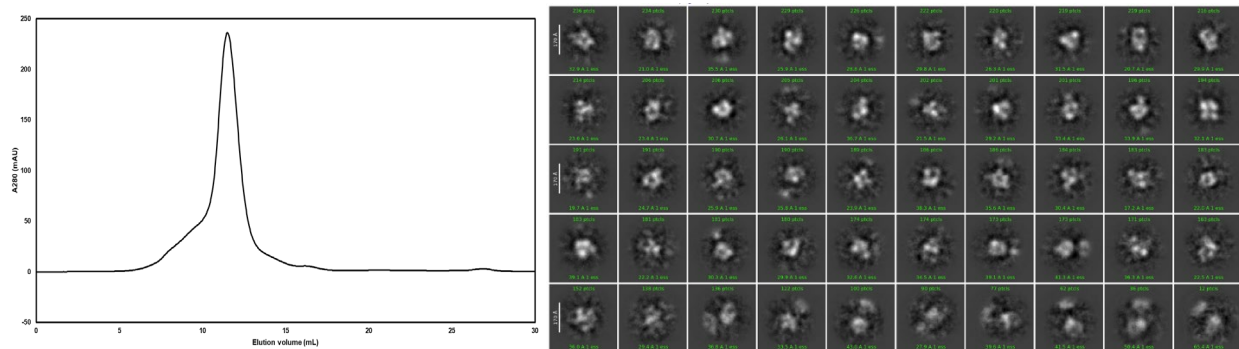


Figure S2. Result from Superdex 200 gel filtration column displays a peak at ~11.5ml which is corresponding to a molecular weight larger than 160KDa, consistent with the protein-tagged AbmR tetramers (left). The 2D classification result of a negatively staining EM study displays a particle size of about 100nm, agreeing with that of the protein-tagged AbmR tetramers.