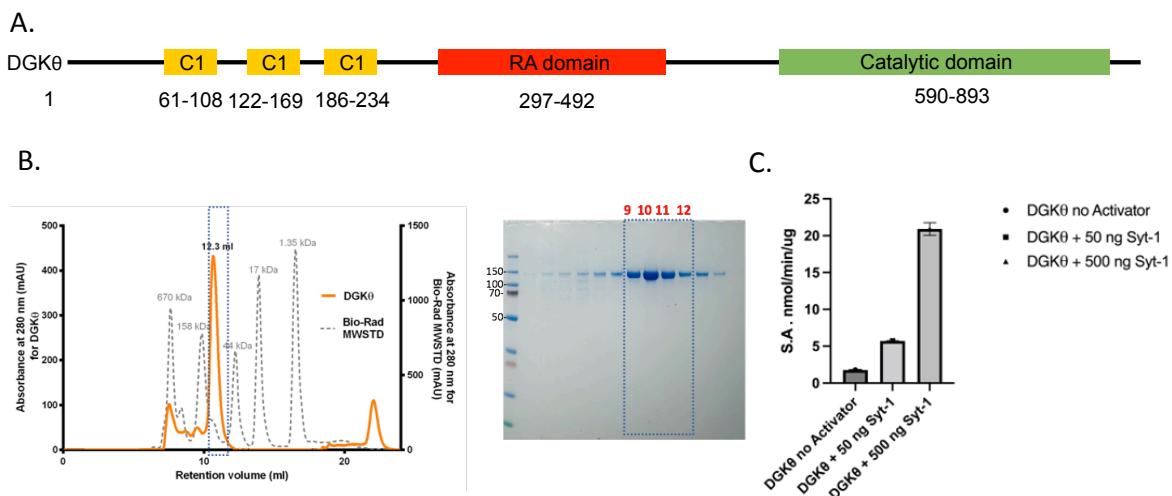
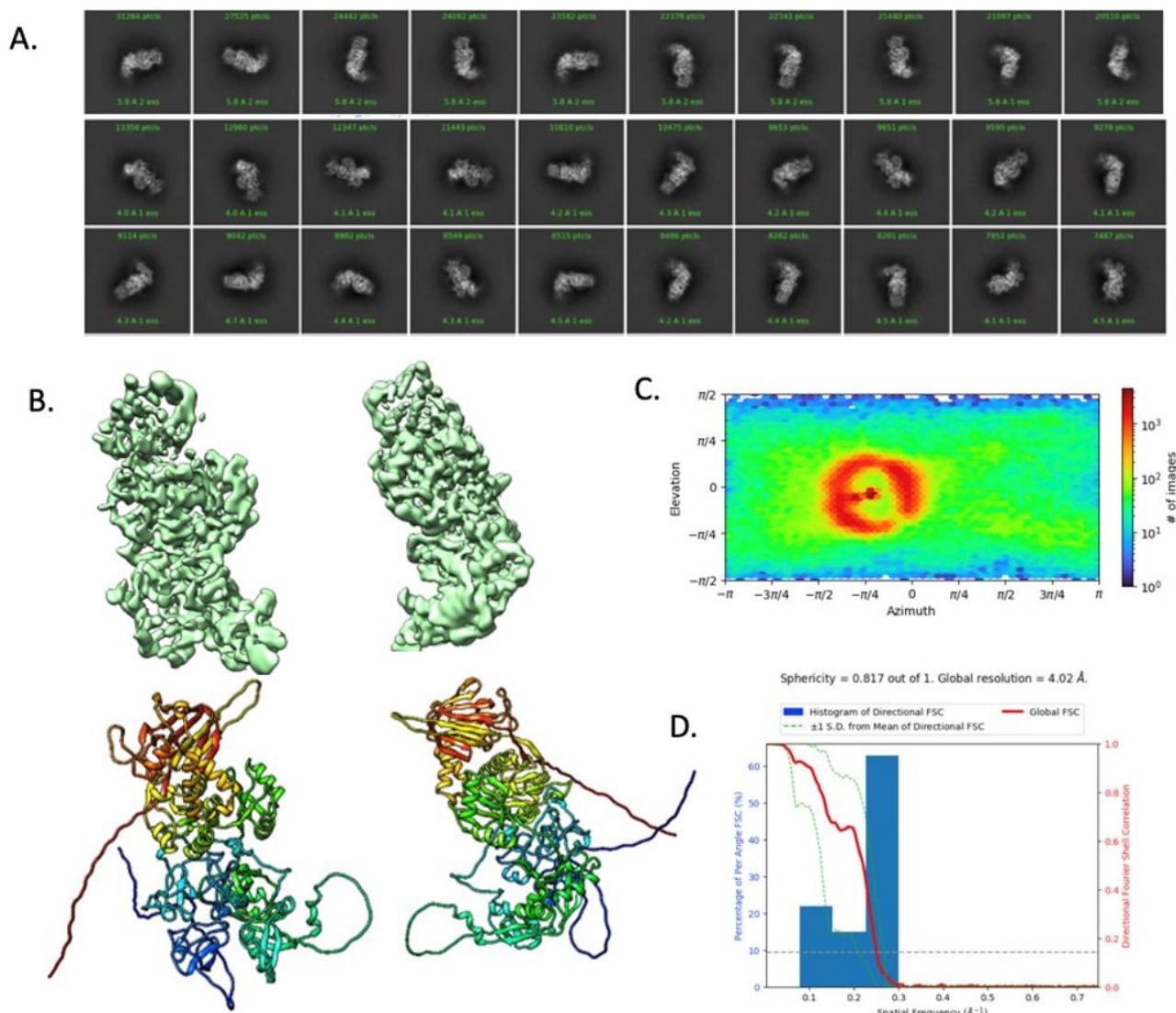


**Figure 1.**



**Figure 1.** A. Structure basis of the DGK $\theta$ . B. Gel filtration profile and SDS-PAGE of DGK $\theta$ . C. Kinase activity assays of DGK $\theta$  with and without neuronal activator.

**Figure 2.**



**Figure 2.** cryoEM data processing of DGK $\theta$ . A. Representative 2D class average. B. 3D reconstruction of DGK $\theta$  compared to alphafold prediction. C. View direction distribution D. 3DFSC of DGK $\theta$