



**Figure 1. Preliminary data of TRPM3 sample for cryo-EM screening.** (A) Gel-filtration profile of TRPM3. The peak fractions (fractions 9-12) were pooled and concentrated to ~5 mg/mL. (B) SDS-PAGE of the cryo-EM sample. \*: TRPM3 (2 isoforms). (C) A previous cryo-EM micrograph of TRPM3 at 5 mg/mL collected on a Titan Krios equipped with K3 camera and energy filter. (D) A recent cryo-EM micrograph of a similar TRP channel at 2.5 mg/mL screened on the SECM4 Krios with the Apollo camera.