## **Supplementary Information**

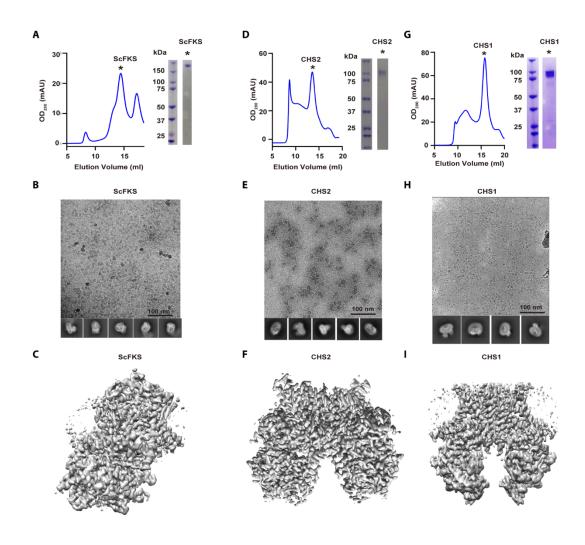


Figure 1. Biochemical and preliminary cryo-EM data

- A) Gel filtration chromatogram and SDS-PAGE image of ScFks.
- B) Representative cryo-EM micrographs and 2D class averages of ScFks.
- C) 3D reconstruction resolved to 2.6 Å resolution (side view) for ScFks.
- D) Gel filtration chromatogram and SDS-PAGE image of CHS2.
- E) Representative cryo-EM micrographs and 2D class averages of CHS2.
- F) 3D reconstruction resolved to 3.0 Å resolution (side view) for CHS2.
- G) Gel filtration chromatogram and SDS-PAGE image of CHS1.
- H) Representative cryo-EM micrographs and 2D class averages of CHS1.
- I) 3D reconstruction resolved to 3.06 Å resolution (side view) for CHS1.