



**Supplementary Figure S1. Recombinant protein purification:** The Sc-Shk-1 was expressed recombinantly in *Pichia pastoris* and purified **(A)** Affinity purification of fusion Sc-Shk-1 using Ni-NTA resin. **(B)** Purification of sumo protease digested fusion Sc-Shk-1 protein, F1-F4: different fractions. **(C)** Purified Sc-Shk-1 protein using size exclusion Chromatography. **(D)** Western blot analysis of purified Sc-Shk-1. (M: protein molecular weight ladder, P: protein). Red arrow shows the Sc-Shk-1 protein.