

Figure 1. (A) UV absorbance (left) and silver-stained denaturing gel (right) show that four-component shelterin (4comp2 which includes POT1, TPP1, TIN2, and TRF2) elutes as a single complex from a gel filtration column. (B) A denaturing gel of individual shelterin components as well as four-component Shelterin (4comp2) purified from insect cells (Lane 1: TRF1, 2: TRF2, 3: co-expressed TPP1 and TIN2, 4: POT1, 5: 4comp2). Data provided by collaborator Prof. Ahmet Yildiz (adapted from publication Amanda Jack et al., Developmental Cell, Vol 57 (2), 277, 2022).

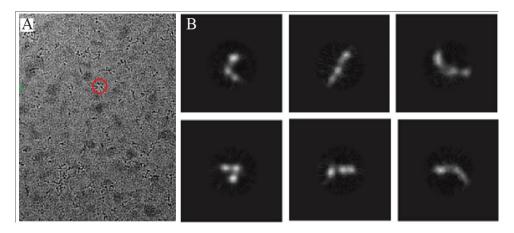


Figure 2. Preliminary cryo-EM data. (A) A telomeric DNA construct (which can form up to six tandem G-quadruplexes) is grid screened on a 300 kV Krios microscope. Four monodisperse DNA constructs are enclosed in the red circle. (B) Several micrographs showing 2D classifications. Distinct while blobs represent individual G-quadruplexes. Data was acquired at Case Western Reserve University's facilities by Prof. Chih-Chia Su.