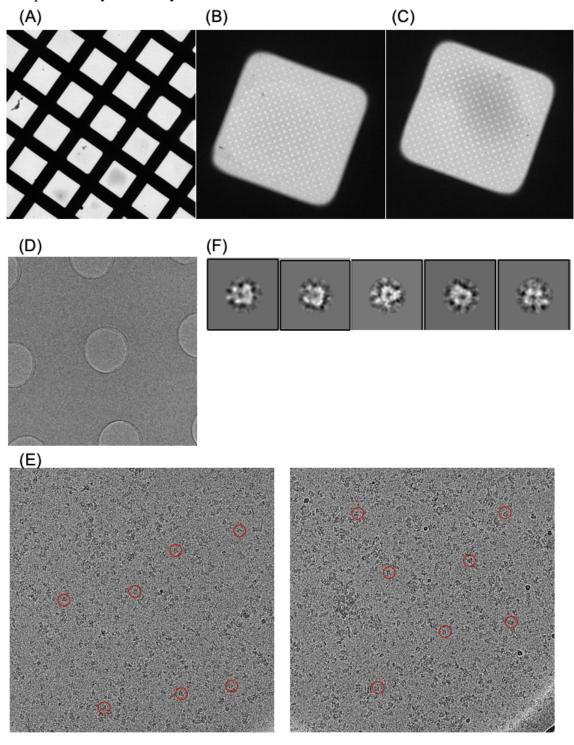
Supplementary information

For this current RAP1 proposal, we have frozen and screened three grids under similar sample and freezing conditions. The representative images at high- and low-magnifications, along with the preliminary data analysis are shown below.



- (A) A partial atlas image at 81x magnification showing the uniform appearance of grid squares across the grid qualified for data collection.
- (B-C) Representative images of the two grids squares acquired at 5300x magnification.
- **(D)** Representative images of the grid holes.
- (E) Two representative micrographs acquired at 47,000x magnification with 1.74 Å/pixel. Red circles indicate protein particles.
- (F) Preliminary 2D class averages generated from ~3200 particles on 8 micrographs of similar quality to images in (E).

All the representative images were acquired on a Titan Krios (300kV) microscope with a Falcon II camera.