

Figure 1 - CryoEM structural characterization of TREK1 in detergent, with representative micrograph, 2D classes, reconstruction, model, and FCS curves for final refinement

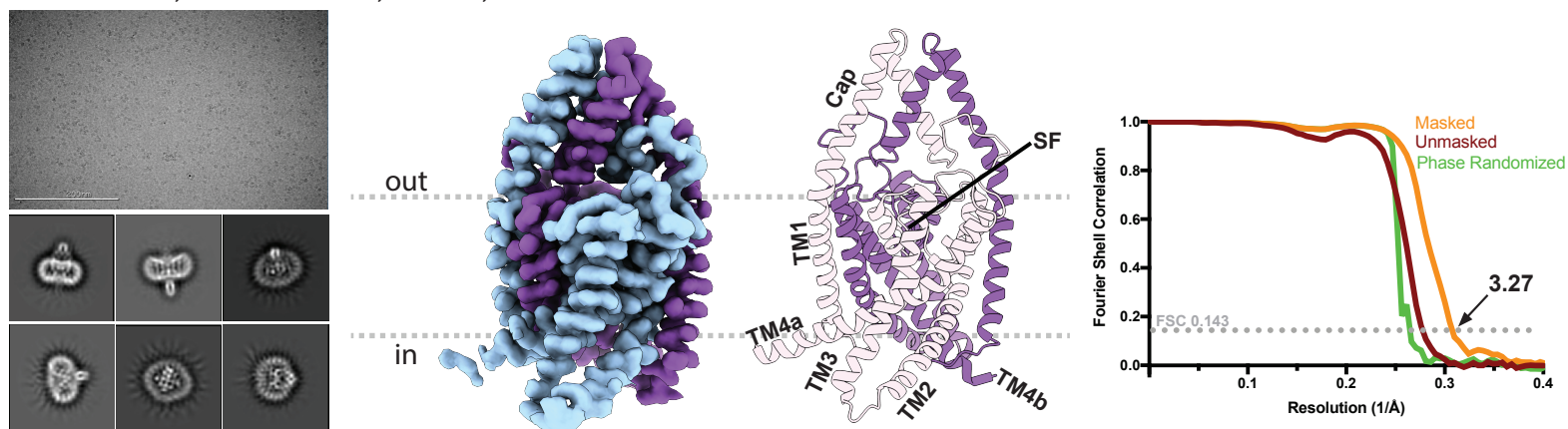


Figure 2 - Adding lipids to the detergent solubilized samples led to alternate conformations of the TM4 helix but no changes in the structure of the selectivity filter

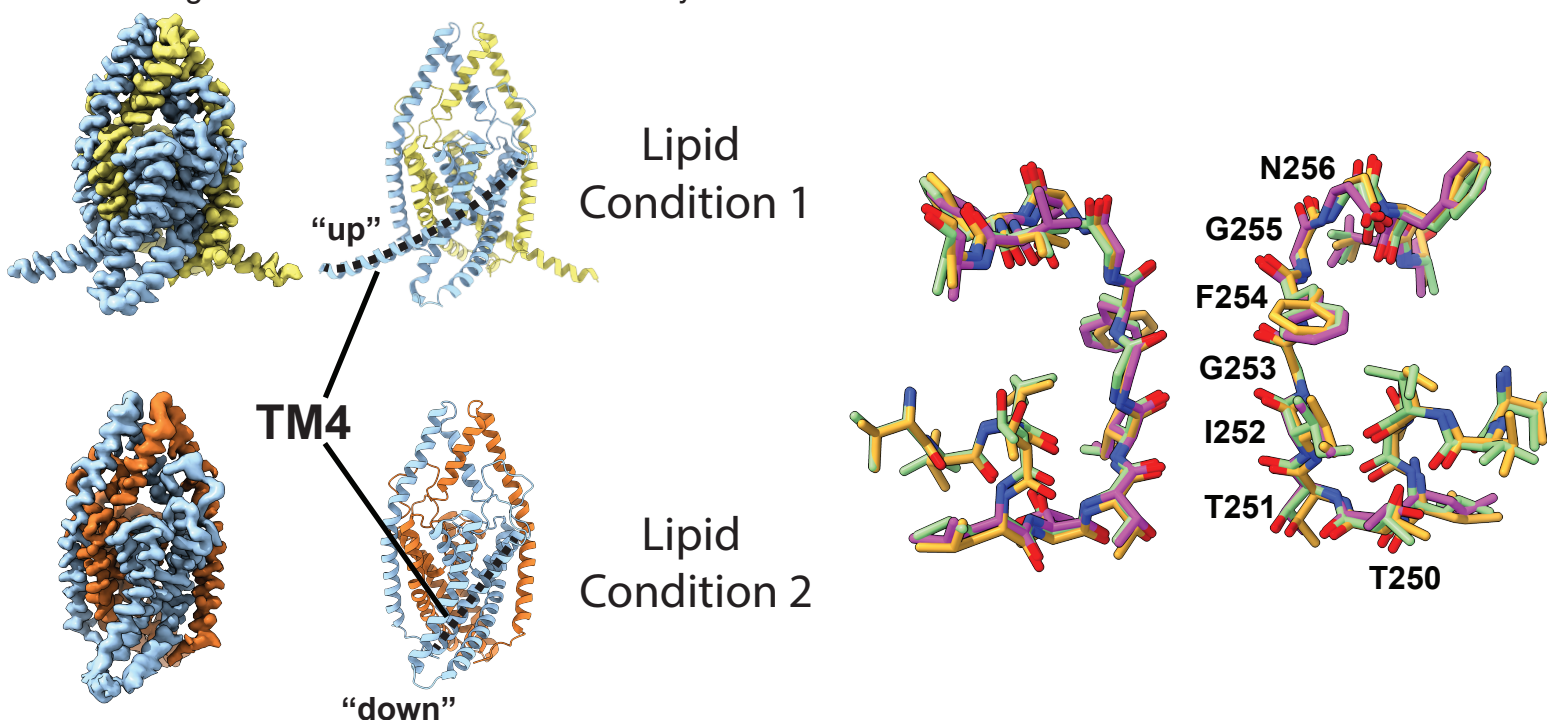
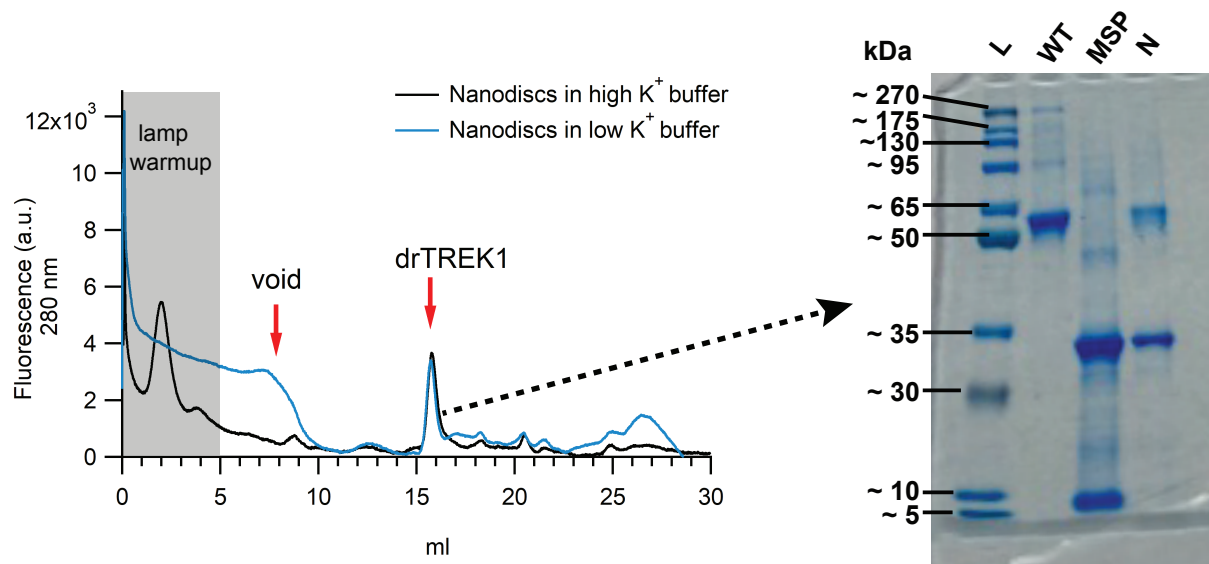


Figure 3 - Fluorescent size exclusion chromatography of drTREK1 embedded in MSP1E3 nanodiscs, showing biochemical stability in high and low potassium. SDS PAGE of the original nanodisc sample in high potassium, showing that the peak at 16ml from a Superose6 increase column contains both MSP and drTREK1 protein



L = ladder (Broad Multi Color Pre-Stained Protein Standard)
 WT = drTREK1 purified in detergent
 MSP = Membrane scaffold protein 1 E3 (MSP1E3)
 N = drTREK1 reconstituted in MSP Nanodisc peak