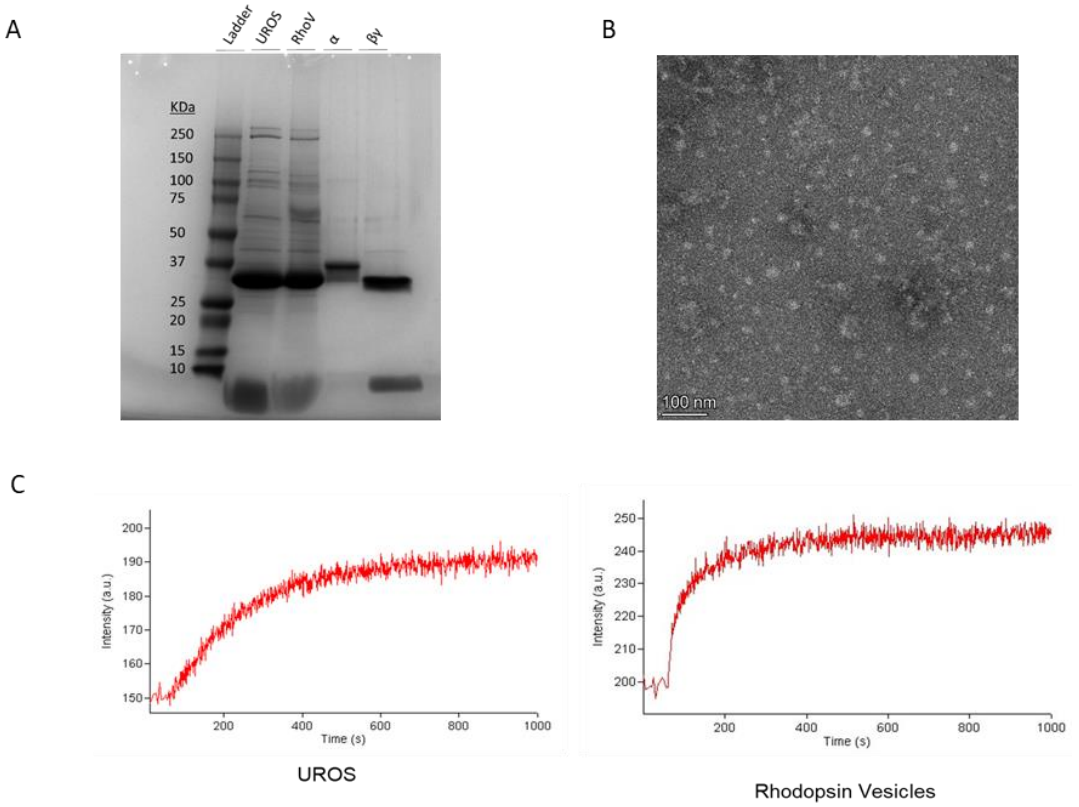

Figure 1: Purification of the rhodopsin signaling pathway and characterization of vesicles containing rhodopsin. (A) SDS-PAGE gel of urea washed rod outer segments (UROS) containing rhodopsin, rhodopsin vesicles made from UROS (RhoV), α, β, and γ. (B) Negative stain image of Rhodopsin vesicles (C) Measuring the rate of GDP to GTP nucleotide exchange of the α nucleotide binding pocket after rhodopsin activation. Comparison of the nucleotide rate of exchange between the native control UROS (left) and Rhodopsin vesicles (right).

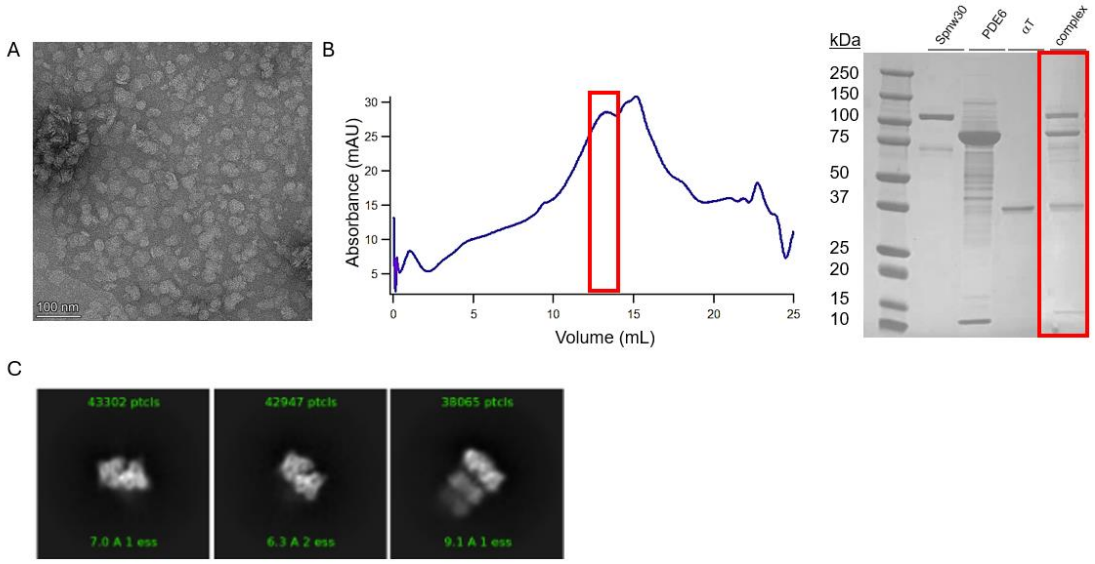

Figure 2: Purification of the PDE6-recombinant αT complex in nanodiscs. (A) Negative stain EM image of purified 30nm nanodiscs containing 95% phosphotidylcholine and 5% 18:1 DGS-NTA(Ni) lipids. (B) Superose6 analytical trace of the resulting PDE6-αT complex in nanodiscs. The indicated fraction was run on an SDS-page gel that showed all three proteins (indicated in the first three lanes) eluting in the same peak (lane 4). (C) 2D classes of top down (left) bottom up (middle) and side (right) orientations of PDE6.