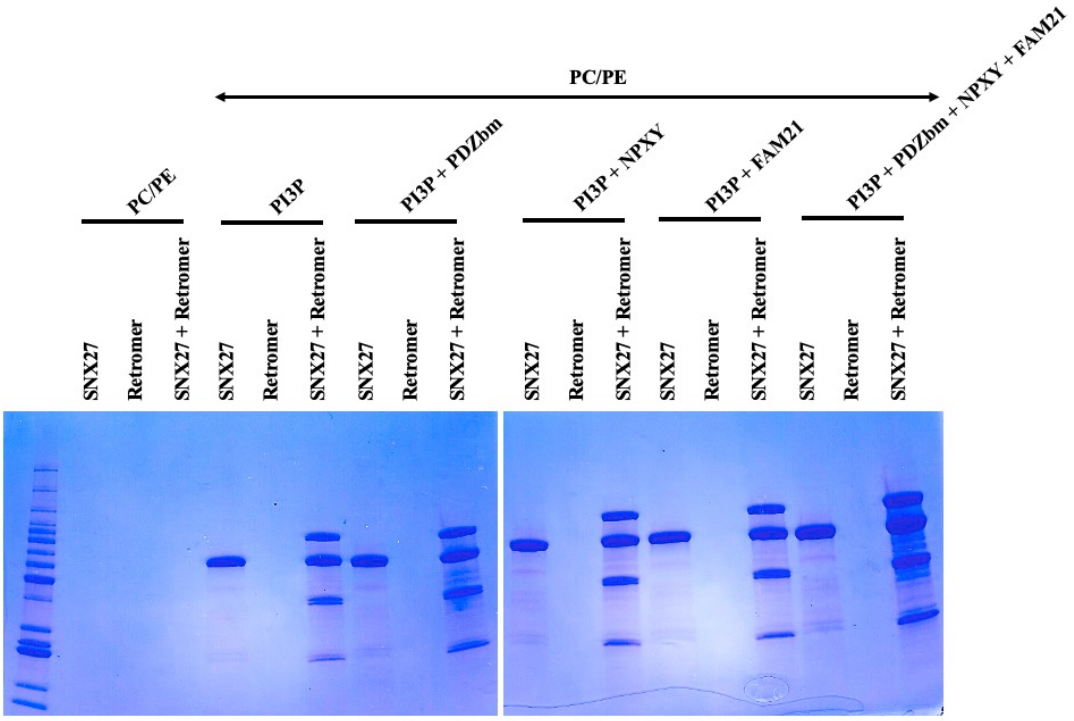

Figure 1. SNX27/retromer reconstitution on membranes. Liposome pelleting assays reveal conditions for recruiting SNX27/retromer efficiently to PI3P-enriched membranes. SNX27 uses its PX domain for membrane recruitment, and retromer requires SNX27 to bind membranes in the presence of PI3P. Addition of cargo and regulatory partners substantially enhances SNX27/retromer recruitment (far right). These data suggest optimal conditions for recruiting SNX27/retromer to PI3P-enriched liposomes or nanodisus for cryoET studies.

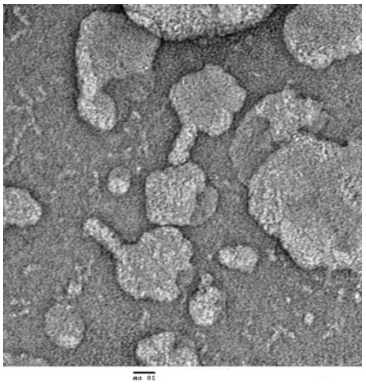

Figure 2. SNX27/retromer liposomes in negative stain. SNX27/retromer forms small tubules emanating from PI3P-enriched liposomes in the presence of cargo. No tubules are formed on control liposomes (data not shown) Scale bar: 20 nm.

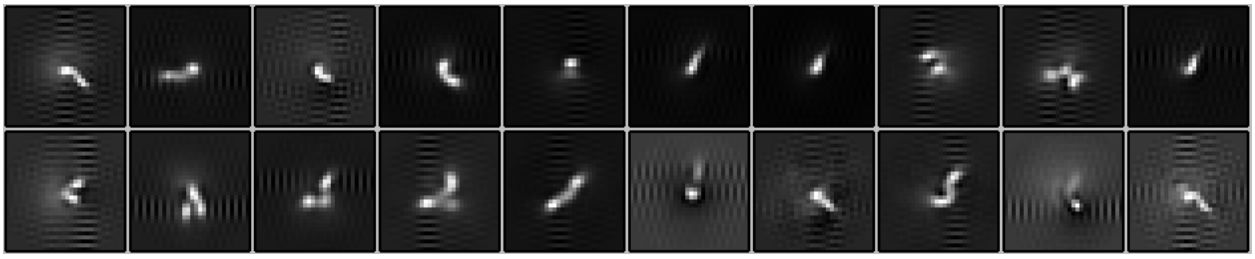

Figure 3. Preliminary VARP 2D classification. Top 20 classes (bin 10; 10.7 Å/pixel) with 3.4 million particles. Scale bar: 100 Å.