



Figure S4 Characterization of liposome binding by Beclin 1 ECD. **(A)** Beclin 1 ECD associates with liposome by sucrose gradient sedimentation analysis. Liposome co-sediments with sucrose of low percentage, where Beclin 1 ECD was also detected (top panel). Free Beclin 1 ECD co-sediments with sucrose of high percentage (top and middle panels). The soluble protein GST failed to co-sediment with liposome (bottom panel). **(B)** Quantitative analysis of Beclin 1 ECD binding to liposomes enriched with increasing amounts of a specific phospholipid. PC was used as the fixed component. For example, liposomes labeled with 10%, 20%, 30%, 40%, and 50% PE contained 90%, 80%, 70%, 60%, and 50% PC, respectively. This analysis indicates that Beclin 1 ECD preferentially binds to lipid membrane enriched with cardiolipin.