



**Figure S5 The BATs domain determines the ER-binding capacity of PI3KC3 complexes *in vitro*.** **(A)** 1/6 of the protein input for the flotation assays shown in **B** and **C**. **(B)** Flotation assay to examine the interaction of C1, C2 and C2-BATs with 6% PI-containing liposomes in a sucrose gradient (from top to bottom: 0, 20%, 25%, 30%). All 14 fractions from top to bottom were analyzed by immunoblotting using antibodies against VPS34, ATG14L, UVRAG and Beclin1. **(C)** Flotation assay to examine the interaction of C1 and C2 with 6% PI3P-containing liposomes in a sucrose gradient (from top to bottom: 0, 20%, 25%, 30%). All 14 fractions from top to bottom were analyzed using antibodies against VPS34, ATG14L, UVRAG and Beclin1. **(D)** Subcellular fractionation was performed on 293F cells to obtain the post-nuclear supernatant fraction (Total(PNC)), the cytosolic fraction (Cytosol) and the ER fraction (Microsome). Equivalent amounts of each fraction were subjected to immunoblotting with antibodies against specific organelle markers. **(E)** 1/5 of the input protein for the flotation assay in **F**. **(F)** Flotation assay to examine the interaction of C1, C1  $\Delta$ BATs, C2 and C2-BATs with the ER fraction in a sucrose gradient (from top to bottom: 0, 20%, 25%, 30%). All 14 fractions from top to bottom were analyzed using antibodies against VPS34, ATG14L, UVRAG and Beclin1.