

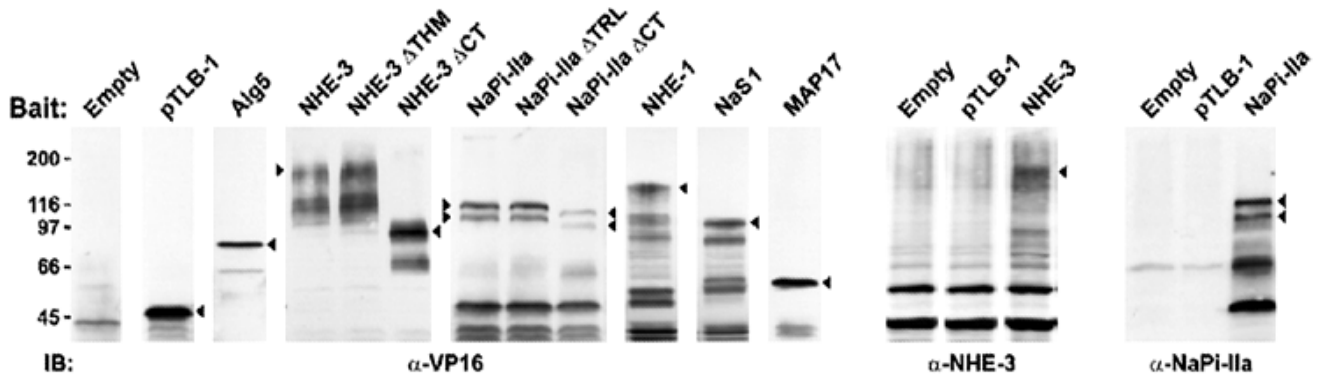
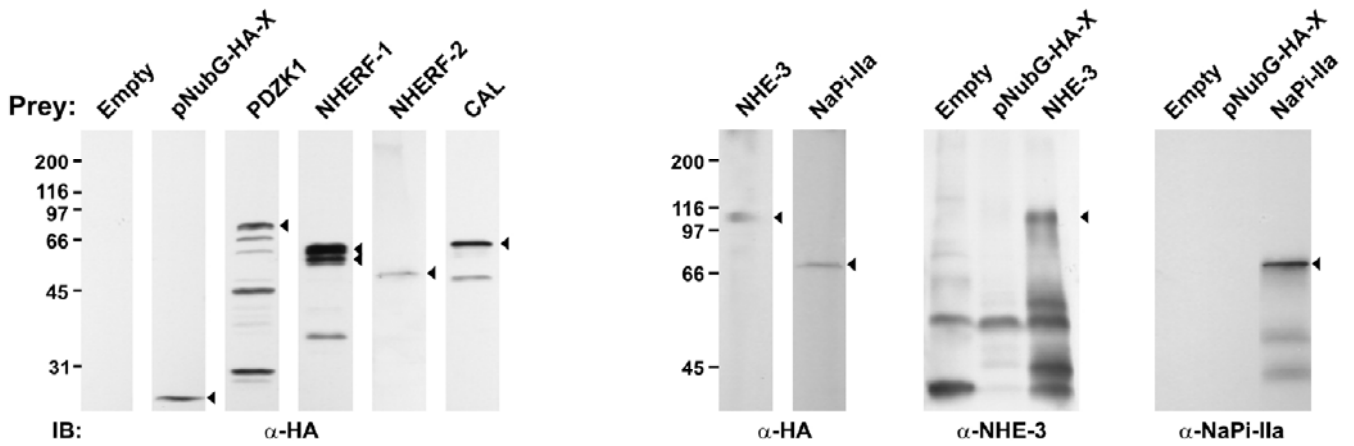
solubilized membranes of oocytes from single injected HA-NaPi-IIa were mixed with that of myc-NaPi-IIa and used for immunoprecipitation.

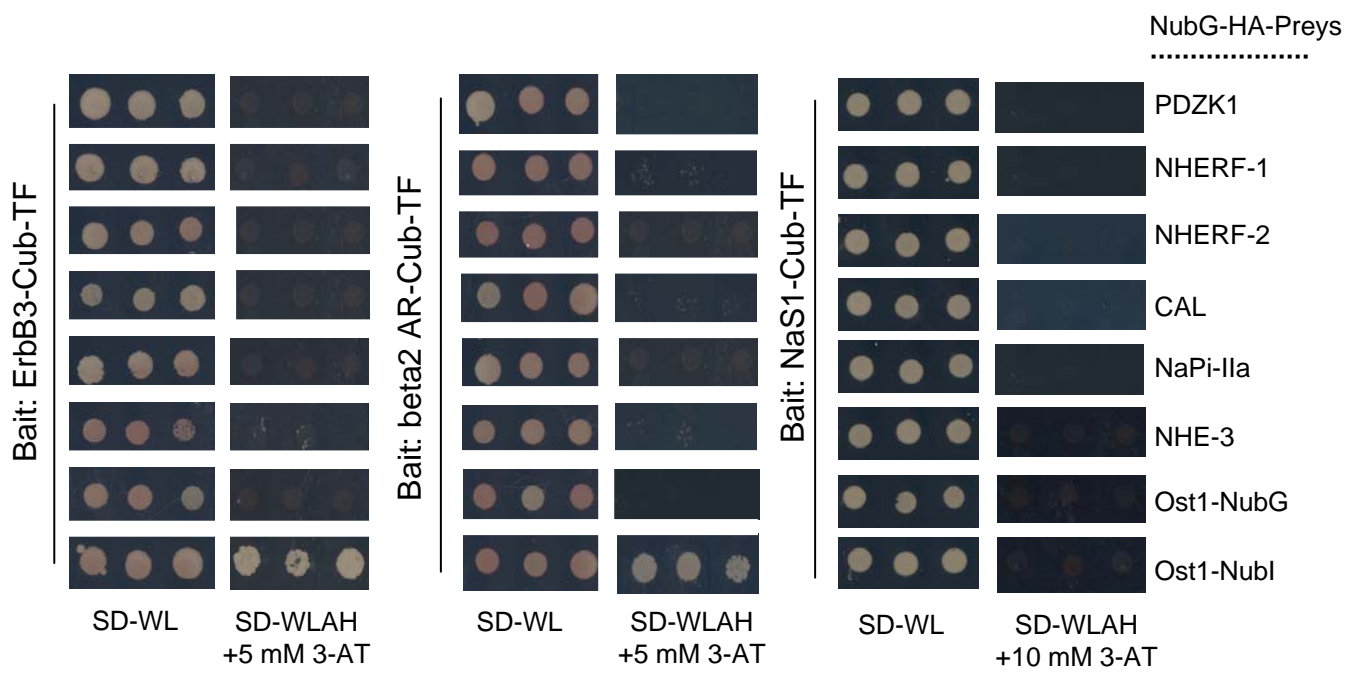
**Supplementary Figure 1.** Characterization of TF-Cub-Baits and NubG-HA-Preys in Yeast.

Full-length or C-terminal ablated ( $\Delta$ ) baits (**A**) and full-length preys (**B**) were expressed in yeast from either bait (pCLB-1, pTLB-1) or prey (pNubG-HA-X) vectors, respectively. Proteins from mid log-phase cultures in identical amounts were resolved on SDS-PAGE and immunoblotted (IB) with antisera to the transactivator VP16, the HA-tag or epitopes on the native proteins as shown (n = 2). The exposure time varied for separated stripes. The largest immunoreactive band (arrowheads) correlated with a full-length form of each protein.

**Supplementary Figure 2.** Specificity of Prey Protein Recognition Verified by Unrelated Human Integral Membrane Bait-Proteins in a Conventional MYTH Format.

Baits-TF-Cub of human NaS1, human Erb3 (an epidermal growth factor 3 of the tyrosine kinase receptor family) and human  $\beta_2$ AR (a beta-2 adrenergic receptor) were combined in yeast with NubG-HA-Preys of PDZK1, NHERF-1, NHERF-2, CAL, NaPi-IIa, NHE-3, Ost1-NubG (negative control) or Ost1-NubI (positive control). Cells were rescued on minimal SD-WL and selective SD-WLAH medium in triplicate dots.

**A****B**



Supplementary Figure 2