**Figure S1. Sequence logos for PH domain.** Position-specific logos for the secondary structure elements of PH domain (generated by Weblogo server). $\beta_4$ and $\beta_5$ are not included because of the high variation within these two $\beta$-sheets. The size of residue indicates the relative frequency of the residue at the corresponding position.

N: within each secondary structure
- N: before each secondary structure
+ N: after each secondary structure
(N): dispensable
N: involved in PIP2/PIP3 binding
*: solvent-accessible position where hydrophobic residues are frequently observed
\(\uparrow\): residues folding into the hydrophobic center