Figure S3: Influence of PTEN phosphorylation status on substrate phosphatase activity

Hydrolysis of vesicular lipid substrate by multiple PTEN proteins.

Hydrolysis of Ins(1,3,4,5)P$_4$ by multiple PTEN proteins

Figure S3. Time courses of PTEN activity against (A) PtdIns(3,4,5)P$_3$ containing vesicles and (B) soluble Ins(1,3,4,5)P$_4$ are shown comparing wild-type enzyme with PTEN protein carrying mutations in 3 of the C-terminal phosphorylation sites shown to be phosphorylated upon leptin stimulation (Ser380, Thr382, Thr383), changing these to either alanine to block phosphorylation (A3PTEN), or aspartic acid to mimic phosphorylation (D3PTEN). Lipid substrate reactions were performed with 100 ng of recombinant protein at 37°C towards 1 nM PtdIns(3,4,5)P$_3$ at a fixed molar fraction of Xs 0.00001 in PtdCho vesicles containing PtdIns(4,5)P$_2$ at a fixed molar fraction of Xs 0.05 extruded to 30nm in diameter. The data are means ± S.E.M. for two experiments performed in triplicate. Soluble substrate reactions were performed with 5 µg of recombinant protein at 37°C towards 1 µM Ins(1,3,4,5)P$_4$. 