

## 32-2948: bP85a Recombinant Protein

**Alternative Name :** Phosphatidylinositol 3-kinase regulatory subunit alpha, PI3-kinase p85 subunit alpha, PtdIns-3-kinase p85-alpha, PI3K, P85a.

### Description

Source : Leishmania tarentolae. Phosphoinositide 3-kinase subunit p85a Bovine Recombinant has a molecular weight of 83.5 kDa. P85a functions as the regulatory subunit of the class IA PI3-kinase isoforms a, b, and d. It contains two SH2 domains that bind to tyrosine-phosphorylated growth factor receptors or substrate adaptor proteins. It also contains a BH (breakpoint cluster region homology) domain that shows GAP activity towards the small GTPases Rab4, Rab5, Cdc42, Rac1 and to a lesser extent towards Rab6 and Rab11. It was shown that PI3Ka catalytic subunit mediated phosphorylation of the p85a adapter reduces the lipid kinase activity of the heterodimer and this gives hints for PI3K-dependent signaling events not requiring production of 3'-phosphorylated phosphoinositides. PI3Ka protein kinase activity has been implicated in IRS-1 serine phosphorylation in insulin-treated adipocytes and in STAT3 and IRS-1 phosphorylation upon activation of the type 1 IFN receptor by IFN- $\alpha$ .

### Product Info

**Amount :** 10  $\mu$ g  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** Supplied as a 1 mg/ml solution in 25mM HEPES, pH 8.0, 25mM NaCl, 2.5mM MgCl<sub>2</sub> and 50% glycerol.  
**Storage condition :** P85a although stable at 4°C for 1 week, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

