

32-3077: PI3Kb Recombinant Protein

Alternative Name : Phosphoinositide 3-kinase beta p110/p85, PI3K β , PI3Kb.

Description

Source : Sf9 insect cells. Phosphoinositide 3-kinase beta Human Recombinant is a glycosylated protein having a molecular weight as follows: p85 chain 83.5 kDa, p110 chain 124.3 kDa. The PI3Kb isoform can be activated by insulin via the insulin receptor to initiate a cascade of events that control cell growth and metabolism. The activation of PI3Kb is mediated by the p85 regulatory subunit binding to tyrosine phosphorylated insulin receptor substrate (IRS) proteins (e.g. IRS-1 and IRS-2). It was also shown that PI3Kb is involved in apoptosis in human colon carcinoma cells. Injection of neutralizing antibodies specific to p110b in WiDr, HCT116 and CO 115 adenocarcinoma cells inhibited de novo DNA synthesis. PI3Kb is the major PI3K isoform required for apoptotic cell and Fc-g receptor mediated phagocytosis shown for primary mouse macrophages and the Jurkat human leukemia T cell line. It was shown by several research groups that the catalytic subunit of PI3Kb can be activated by Gbg subunits of G-protein coupled receptors.

Product Info

Amount :	2.5 μ g
Purification :	Greater than 90.0% as determined by SDS Page.
Content :	0.9 mg/ml solution in PBS and 2mM MgCl ₂ .
Storage condition :	PI3Kb 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.

Application Note

The specific activity was found to be 3,000 units/mg (1 unit is defined as 1 picomole phosphate transferred to PIP₂ per minute).