



Product Datasheet

Product Name	Phosphoinositide 3-kinase beta p110 β /p85 α Human Recombinant
Cata No	CB500888
Source	<i>Sf9 insect cells.</i>
Synonyms	Phosphoinositide 3-kinase beta p110 β /p85 α , PI3K β , PI3Kb.

Description

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. Phosphoinositide 3-kinase beta Human

Recombinant is a glycosylated protein having a molecular weight as follows: p85 α chain 83.5 kDa, p110 β chain 124.3 kDa.

Physical Appearance

Sterile filtered liquid formulation.

Biological Activity

~ 3 nmol/mg/min using phosphatidylinositol as the substrate.

Purity

Greater than 90.0% as determined by SDS Page.

Formulation

0.5 mg/ml solution in 10mM Hepes, pH 7.5, 100mM NaCl, 2.5mM MgCl₂, and 50% glycerol.

Stability

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.