

Active Recombinant Human PIK3CB/PIK3R1 protein, His-tagged

Cat. No. PIK3CB&PIK3R1-155H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human p110 beta and human p85 alpha were co-expressed by baculovirus in Sf9 insect cells using an N-terminal His tag on both proteins.
Species	Human
Source	Insect Cells
Description	The PI3K comprises of a 110 kDa catalytic subunit and an 85 kDa regulatory subunit. A number of isoforms of the 110 kDa catalytic subunit and the 85 kDa regulatory subunit exist in cells. The p110 beta catalytic subunit (PIK3CB) plays a role in regulating the formation and stability of alpha-2B-beta-3 integrin adhesion bonds, which are necessary for shear force-induced platelet activation. In animal model of prostate tumor formation induced by the tumor suppressor PTEN loss, ablation of p110 beta impedes tumorigenesis with a concomitant diminution of AKT phosphorylation.
Form	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Bio-activity	510 nmol/min/mg
Molecular Mass	p110 beta ~111 kDa and p85 alpha ~86 kDa
Purity	>80%

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Applications	Kinase Assay
Stability	1 year at -70 centigrade from the date of shipment
Storage	Store product at –70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1µg/µl
GENE INFORMATION	
Gene Name	PIK3CB phosphoinositide-3-kinase, catalytic, beta polypeptide [Homo sapiens]
Official Symbol	PIK3CB
Synonyms	PIK3CB; phosphoinositide-3-kinase, catalytic, beta polypeptide; PIK3C1; phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta isoform; PI3K-beta; PtdIns-3-kinase p110; PI3-kinase subunit beta; PI3-kinase p110 subunit beta; ptdIns-3-kinase subunit beta; ptdIns-3-kinase subunit p110-beta; phosphatidylinositol-4,5-bisphosphate 3-kinase 110 kDa catalytic subunit beta; PI3K; P110BETA; PI3KBETA; MGC133043; DKFZp779K1237;
Gene ID	5291
mRNA Refseq	NM_006219
Protein Refseq	NP_006210
MIM	602925

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UniProt ID	P42338
Chromosome Location	3q21-qter
Pathway	3-phosphoinositide biosynthesis, organism-specific biosystem; 3-phosphoinositide biosynthesis, conserved biosystem; Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem; Adaptive Immune System, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem;
Function	1-phosphatidylinositol-3-kinase activity; ATP binding; binding; insulin receptor substrate binding; nucleotide binding; phosphatidylinositol 3-kinase activity; phosphatidylinositol 3-kinase activity; phosphatidylinositol-4,5-bisphosphate 3-kinase activity; phosphotransferase activity, alcohol group as acceptor;
	