Active Recombinant Human PIK3CA/PIK3R3 protein, His-tagged

Cat. No. PIK3CA&PIK3R3-152H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human PI3K (p110 alpha/p55 gamma) was co-expressed by baculovirus in Sf9 insect cells using an N-terminal His tag.
Species	Human
Source	Insect Cells
Description	PI3K (p110 alpha/p55 gamma) or Phosphatidylinositol 3-kinase is a lipid kinase that phosphorylates the inositol ring of phosphatidylinositol at the 3-prime position which serve as second messengers in growth signaling pathways. PI3K comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in the PI3K has been associated with insulin resistance and plays an important role in glucose homeostasis in vivo. PI3K also plays an essential role in the development and induction of mast cells in normal and pathogenic immune responses.
Form	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Bio-activity	420 nmol/min/mg
Molecular Mass	p110 alpha ~111 kDa and p55 gamma ~61 kDa

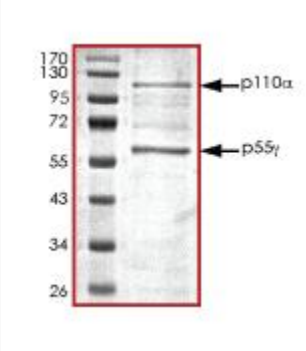
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>70%
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	PIK3CA phosphoinositide-3-kinase, catalytic, alpha polypeptide [Homo sapiens]
Official Symbol	PIK3CA
Synonyms	PIK3CA; phosphoinositide-3-kinase, catalytic, alpha polypeptide; phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha isoform; PI3K; PI3K-alpha; PI3-kinase p110 subunit alpha; ptdIns-3-kinase subunit p110-alpha; serine/threonine protein kinase PIK3CA; phosphatidylinositol 3-kinase, catalytic, 110-KD, alpha; phosphatidylinositol 3-kinase, catalytic, alpha polypeptide; phosphatidylinositol-4,5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha; phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit, alpha isoform; p110-alpha; MGC142161; MGC142163;
Gene ID	5290
mRNA Refseq	NM_006218

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Refseq	NP_006209
MIM	171834
UniProt ID	P42336
Chromosome Location	3q26.3
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; insulin receptor substrate binding; nucleotide binding; phosphatidylinositol 3-kinase activity; phosphatidylinositol-4,5-bisphosphate 3-kinase activity; phosphotransferase activity, alcohol group as acceptor; protein binding; protein kinase activator activity; protein serine/threonine kinase activity;
	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA