Active Recombinant Human PIK3CA and Mouse Pik3ca protein, His-tagged

Cat. No. PIK3R1&Pik3ca-155H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length mouse p110 alpha 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 alpha catalytic subunit (PIK3CA) is frequently mutated or amplified in a variety of cancers including ovarian and colon. PIK3CA gene copy number is increased in over 30% of ovarian cancers and this leads to increased PI3-kinase activity. Furthermore, the activity of p110 alpha is essential for vascular development and inactivation of p110 alpha leads to severe defects in angiogenic sprouting and vascular remodeling.
Form	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Bio-activity	3600 nmol/min/mg
Molecular Mass	p110 alpha ~111 kDa and p85 alpha ~86 kDa
Purity	>70%

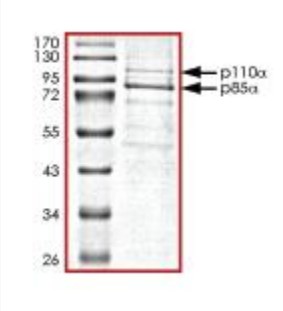
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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	PIK3R1 phosphoinositide-3-kinase, regulatory subunit 1 (alpha) [Homo sapiens]
Official Symbol	PIK3R1
Synonyms	PIK3R1; phosphoinositide-3-kinase, regulatory subunit 1 (alpha); phosphatidylinositol 3-kinase regulatory subunit alpha; GRB1; p85; p85 ALPHA; PI3-kinase subunit p85-alpha; PI3K regulatory subunit alpha; ptdIns-3-kinase regulatory subunit alpha; phosphatidylinositol 3-kinase-associated p-85 alpha; phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha; phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha); p85-ALPHA;
Gene ID	5295
mRNA Refseq	NM_181523
Protein Refseq	NP_852664
MIM	171833

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

UniProt ID	P27986
Chromosome Location	5q13.1
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 binding; ErbB-3 class receptor binding; insulin binding; insulin receptor binding; insulin receptor substrate binding; insulin-like growth factor receptor binding; neurotrophin TRKA receptor binding; phosphatidylinositol 3-kinase regulator activity; phosphatidylinositol-4,5-bisphosphate 3-kinase activity; protein binding; protein phosphatase binding;
	

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