

PI3K recombinant protein

PI3K (p110 alpha/p85 alpha), Active

CATALOG # AAA73055	HOST Sf9 insect cells using baculovirus	APPLICATIONS Kinase Assay
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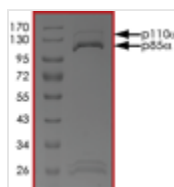
PRODUCT SYNONYMS

PI3K; PI3K (p110 alpha/p85 alpha); Active; PI3K recombinant protein

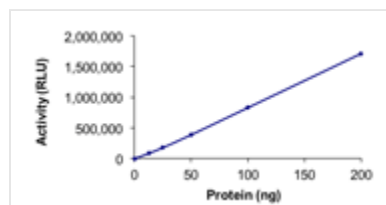
PRODUCT SPECIFICATIONS

Host	Sf9 insect cells using baculovirus
Form/Format	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Sequence Positions	Full length
Sequence Length	9104
Applicable Applications for PI3K recombinant protein	Kinase Assay
Species	Human
Tag	GST tag
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. 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.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for PI3K recombinant protein

Description: Recombinant full-length human p110 alpha subunit and p85 alpha subunit were co-expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag on both proteins.

Scientific Background: 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 and this protein is one of the PI3K mutants (1). 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 (2).

Product Categories/Family for PI3K recombinant protein	Enzymes; Active Lipid Kinases
References	1. Samuels, Y. et al: High frequency of mutations of the PIK3CA gene in human cancers. Science 304: 554 only, 2004. 2. Graupera, M.et al: Angiogenesis selectively requires the p110-alpha isoform of PI3K to control endothelial cell migration. Nature 453: 662-666, 2008.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1024336732
NCBI GeneID	5290
NCBI Accession #	NM_006218.3
NCBI GenBank Nucleotide #	NM_006218
Molecular Weight	~140 kDa; ~110 kDa
NCBI Official Full Name	Homo sapiens phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha (PIK3CA), mRNA
NCBI Official Synonym Full Names	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha
NCBI Official Symbol	PIK3CA
NCBI Official Synonym Symbols	MCM; CWS5; MCAP; PI3K; CLOVE; MCMTK; PI3K-alpha; p110-alpha
NCBI Protein Information	phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform
UniProt Protein Name	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform
UniProt Gene Name	PIK3CA
UniProt Synonym Gene Names	PI3-kinase subunit alpha; PI3K-alpha; PI3Kalpha; PtdIns-3-kinase subunit alpha; PtdIns-3-kinase subunit p110-alpha; p110alpha

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/pik3ca-recombinant-protein-sf9-kinase-assay/73055>