

PI3Kalpha/p85 recombinant protein

Recombinant PI3Kalpha/p85 protein complex

CATALOG #
AAA60419

HOST
Baculovirus

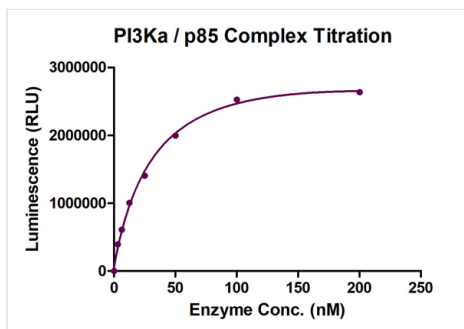
PRODUCT SYNONYMS

PI3Kalpha/p85; Recombinant PI3Kalpha/p85 protein complex; Phosphoinositide 3-kinase; PI3K; P110-Alpha; CLAPO; CLOVE; CCM4; MCAP; MCM; PI3Kalpha/p85 recombinant protein

PRODUCT SPECIFICATIONS

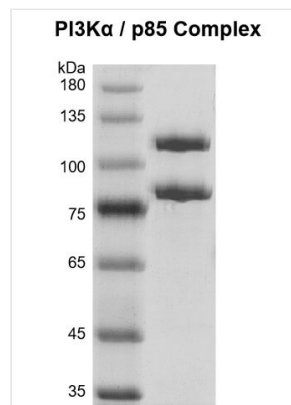
Host	Baculovirus
Form/Format	Recombinant PI3Ka/p85 Complex is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.
Protein Species	Human
Protein Details	Recombinant PI3Ka/p85 Complex that includes full length human PI3Ka protein (accession number NP_006209.2) with an N-terminal DYKDDDDK tag and full length human p85 protein (accession number NP_852664.1) without tag was expressed in Hi5 cells. The molecular weights of PI3Ka and p85 are 125.6kDa and 83.6kDa, respectively.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

IMAGES



Application Data

ADP-Glo assay for PI3Ka/p85 Complex activity 0.125 ug/ul PI-3 Kinase Lipid Substrate was incubated with different concentrations of PI3Ka/p85 Complex protein in a 10 ul reaction system containing 40 mM Tris-HCl pH 7.4, 20 mM MgCl₂, 50 uM DTT, 0.1 mg/ml BSA and 100 uM ATP for 1 hour, then add 10 ul ADP-Glo Reagent at RT for 60min. Then add 20 ul Kinase Detection Reagent incubates at RT for 60min. All the operations and reactions were performed at RT. Finally, Luminescence measurement is collected by BMG.



SDS-PAGE

Recombinant PI3Ka/p85 protein 10% SDS-PAGE Coomassie staining MW: PI3Ka: 125.6kDa, p85: 83.6kDa Purity: >=90%

ADDITIONAL INFORMATION

Related Product Information for PI3Kalpha/p85 recombinant protein	Phosphoinositide 3-kinase (PI3K) family of lipid kinases are divided into three major classes based on primary sequence, substrate preference, and regulation. While class IA PI3Ks are heterodimeric enzymes composed of a catalytic subunit (p110a, p110b, or p110d) complexed with one of five regulatory subunits (p85a, p55a, p50a, p85b, or p55g), the classIB enzyme is a dimer made of p110g catalytic subunit and p101or p84 regulatory subunit. The class I catalytic subunit polypeptides p110a, p110b, p110d, and p110g are encoded by PIK3CA, PIK3CB, PIK3CD, and PIK3CG, respectively. The regulatory subunits are encoded by five genes: PIK3R1 codes p85a, p55a, and p50a; PIK3R2 codes p85b; PIK3R3 codes p55g; PIK3R5 codes p101; and PIK3R6 codes p84. PI3K is a lipid and protein kinase that can be activated by receptor tyrosine kinases, cytokine receptors, chemokine G protein–coupled receptors, or oncogenes, including RAS. PI3K converts phosphatidylinositol 4,5-bisphosphate (PIP2) to phosphatidylinositol-3,4,5-triphosphate (PIP3), which leads to activation of pyruvate dehydrogenase kinase 1 (PDK1) and the serine/threonine kinase AKT (PKB) (7). AKT has many downstream effectors, which regulate the cell cycle, apoptosis, protein translation, autophagy, and metabolism. Most cytokines and RTK ligands signal through class IA PI3K.
Product Categories/Family for PI3Kalpha/p85 recombinant protein	Kinase; Recombinant Proteins

NCBI AND UNIPROT INFORMATION

Molecular Weight	The molecular weights of PI3Ka and p85 are 125.6kDa and 83.6kDa
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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/pi3kalpha/p85-recombinant-protein-baculovirus/60419>