

# Recombinant Human PI3K/p110 delta&p85 alpha Kinase

Catalog No.: RP03359LQ Recombinant

# **Sequence Information**

 Species
 Gene ID
 Swiss Prot

 Human
 5293&5295
 000329&P27

 986
 986

#### **Tags**

N-His-GST (PIK3CD) & N-His (PIK3R1)

#### **Synonyms**

PI3K; PIK3CD; PK3CD; PI3-kinase subunit delta; PI3Kdelta; PtdIns-3-kinase subunit delta; p110 delta; p110d; PIK3R1; GRB1; p85a; PI3-kinase subunit p85-alpha; p85 alpha

#### **Product Information**

Source	Purification
Baculovirus-Insect	> 90% by SDS-PAGE
Cells	and HPLC

Calculated MW Observed MW 148.1 kDa/85.6 kDa 100-150 kDa/70-85

kDa

## **Endotoxin**

 $< 1.0 \; \text{EU/}\mu\text{g}$  of the protein by LAL method

#### **Formulation**

Supplied as a 0.22  $\mu$ m filtered solution in 50 mM Tris-HCl, 200 mM NaCl, 20% glycerol, 1 mM DTT. (pH 7.5). Contact us for customized product form or formulation.

#### Reconstitution

Please use running water to thaw it quickly.

#### **Contact**

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# **Background**

Phosphoinositide 3-kinases (PI3Ks), also called phosphatidylinositol 3-kinases, are a family of enzymes involved in cellular functions such as cell growth, proliferation, differentiation, motility, survival and intracellular trafficking, which in turn are involved in cancer. PI3K comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. PIK3CD also known as phosphoinositide 3-kinase (PI3K) delta isoform or p110 $\delta$ . p110 $\delta$  regulates immune function. In contrast to the other class IA PI3Ks p110 $\alpha$  and p110 $\beta$ , p110 $\delta$  is principally expressed in leukocytes. The Pik3r1 gene locus encodes the 85 kD regulatory subunit, as well as 55 and 50 kD regulatory subunits. It used to be thought that alternative splicing of this gene resulted in three transcript variants encoding different isoforms.

#### **Basic Information**

#### **Description**

Recombinant Human PI3K/p110 delta&p85 alpha Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Pro2-GIn1044 (PIK3CD) & Ser2-Arg724 (PIK3R1)) of Human PIK3CD&PIK3R1 (Accession #O00329&P27986) fused with a N-His-GST (PIK3CD) & N-His (PIK3R1) tag.

## **Bio-Activity**

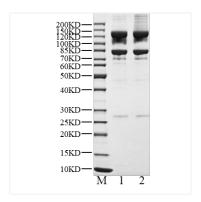
The activity of PK3CD/p85 is based on the ADP-GLO kinase activity assay quantifies kinase activity by measuring the conversion of ATP to ADP catalyzed by the kinase. Specific reagents are used to convert the ADP in the reaction back to ATP, resulting in the production of a luminescent signal.

#### Storage

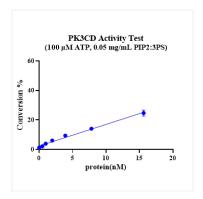
Store at  $-70^{\circ}$ C. This product is stable at  $\leq -70^{\circ}$ C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10  $\mu\text{L}$  are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

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Recombinant Human PI3K/p110 delta&p85 alpha Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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