

PI 3 kinase p85α Polyclonal Antibody

Catalog No: YT6156

Reactivity: Human; Mouse; Rat; Pig

Applications: IF;WB;IHC;ELISA

Target: PI3 Kinase P85a

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

resistance;>>Platinum drug resistance;>>ErbB signaling pathway;>>Ras

signaling pathway;>>Rap1 signaling pathway;>>cAMP signaling

pathway;>>Chemokine signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Phosphatidylinositol signaling system;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>Pl3K-Akt signaling pathway;>>AMPK signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Longevity

regulating pathway - multiple species;>>Cellular senescence;>>Axon guidance;>>VEGF signaling pathway;>>Osteoclast differentiation;>>Focal adhesion;>>Signaling pathways regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>Natural killer cell mediated cytotoxicity;>>T cell receptor signaling

pathway;>

P26450

Gene Name: PIK3R1

Protein Name : Phosphatidylinositol 3-kinase regulatory subunit alpha

Human Gene Id: 5295

Human Swiss Prot P27986

No:

Mouse Gene Id: 18708

Mouse Swiss Prot

No:

Rat Gene ld: 25513

Rat Swiss Prot No: Q63787

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Immunogen: Synthesized peptide derived from PI 3-kinase p85a. at AA range: 550-630

Specificity: This antibody detects endogenous levels of PI 3-kinase p85a.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 54kD,83kD

Cell Pathway: Regulates Angiogenesis; Regulation_Microtubule; Regulation of Actin

Dynamics; SAPK JNK; Stem cell pathway; Insulin Receptor; ErbB/HER; AMPK;

mTOR; B Cell Receptor; Adherens Junction

Background: Phosphatidylinositol 3-kinase phosphorylates the inositol ring of

phosphatidylinositol at the 3-prime position. The enzyme comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. This gene encodes the 85 kD regulatory subunit. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance. Alternative splicing of this gene results in four transcript variants encoding different isoforms. [provided by RefSeq, Jun

2011],

Function: disease:Defects in PIK3R1 are a cause of severe insulin resistance.,domain:The

SH3 domain mediates the binding to CBLB, and to HIV-1 Nef.,function:Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues.,PTM:Polyubiquitinated in T-cells

by CBLB; which does not promote proteasomal degradation but impairs

association with CD28 and CD3Z upon T-cell activation., similarity: Belongs to the

PI3K p85 subunit family., similarity: Contains 1 Rho-GAP

domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 SH2 domains.,subunit:Heterodimer of a p110 (catalytic) and a p85 (regulatory) subunits. Interacts with phosphorylated TOM1L1. Interacts with phosphorylated

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Subcellular Location :

nucleus,cytoplasm,cis-Golgi network,cytosol,plasma membrane,cell-cell junction,phosphatidylinositol 3-kinase complex,phosphatidylinositol 3-kinase complex, class IA,membrane,perinuclear endoplasmic reticulum membrane,

Expression:

Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level).

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