



PI 3 Kinase P85 α Rabbit mAb

Catalog No	YP-rAb-18109
Isotype	IgG
Reactivity	Human,Mouse,Rat,Goat,Pig
Applications	WB,IHC,IF,IP,ELISA
Gene Name	PIK3R1
Protein Name	Phosphatidylinositol 3-kinase regulatory subunit alpha (PI3-kinase regulatory subunit alpha) (PI3K regulatory subunit alpha) (Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha) (PI3-kinase subunit p85)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; IP 1:50-200 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	$\geq 90\%$
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	PIK3R1 ; GRB1 ; Phosphatidylinositol 3-kinase regulatory subunit alpha ; PI3-kinase regulatory subunit alpha ; PI3K regulatory subunit alpha ; PtdIns-3-kinase regulatory subunit alpha ; Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha ; PI3-kinase subunit p85-alpha ; PtdIns-3-kinase regulatory subunit p85-alpha
Observed Band	84kD
Calculated Molecular Weight	84kD
Cell Pathway	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,
Tissue Specificity	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).
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 LIME1 upon TCR and/or BCR activation. Interacts with SOCS7. Interacts with RUFY3 (By similarity). Interacts with phosphorylated LAT, LAX1 and TRAT1 upon TCR activation. Interacts with CBLB. Interacts with HIV-1 Nef to activate the Nef associated p21-activated kinase (PAK). This interaction depends on the C-terminus of both proteins and leads to increased production of HIV. Interacts with HCV NS5A. The SH2 domains interact with the YTHM motif of phosphorylated INSR in vitro. Also interacts with tyrosine-phosphorylated IGF1R in vitro. Interacts with CD28 and CD3Z upon T-cell activation. Interacts with IRS1 and phosphorylated IRS4, as well as with NISCH and HCST.,tissue specificity: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),

Background

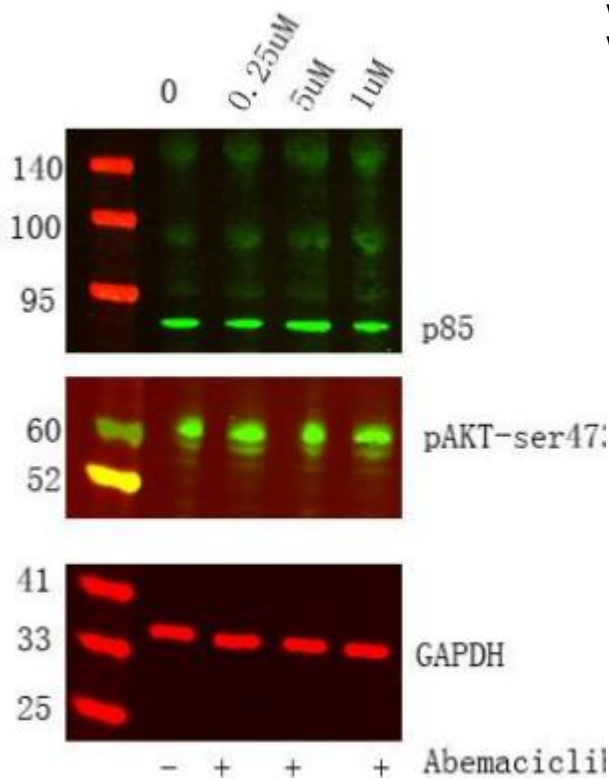
Phosphatidylinositol 3-kinase phosphorylates the inositol ring of phosphatidylinositol at the 3-prime position. The enzyme comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. This gene encodes the 85 kD regulatory subunit. Phosphatidylinositol 3-kinase plays an important 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],

matters needing attention

Avoid repeated freezing and thawing!

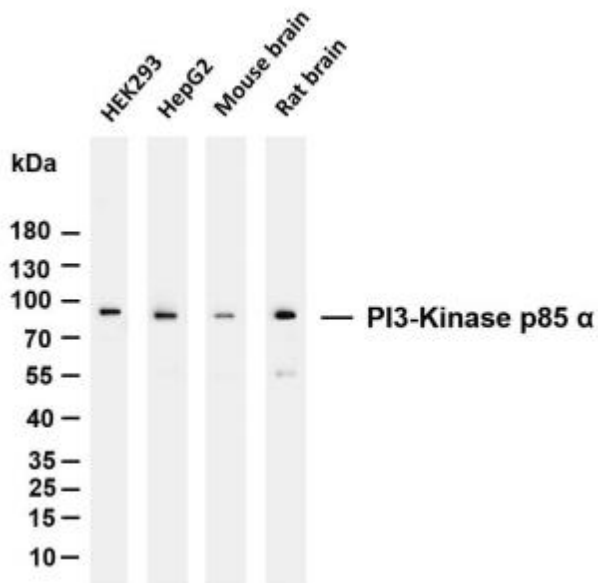
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

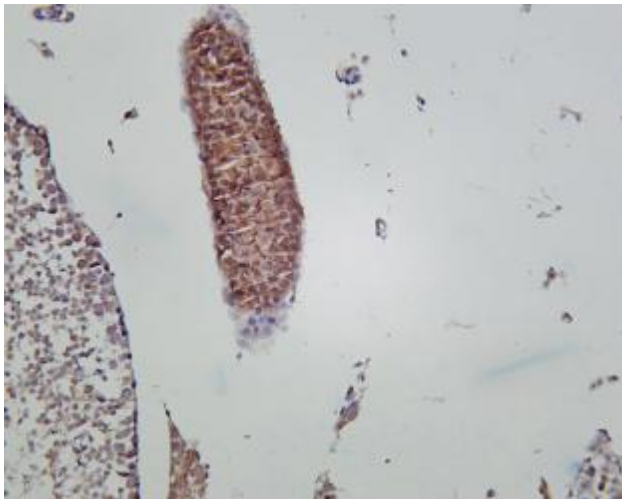


Western Blot analysis using HepG2 whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PI3-Kinase p85 α rabbit mAb (YM8045) diluted at 1:2000. anti-AKT (Phospho Ser473) Rabbit mAb(YM8304) diluted at 1:2000. Loading contrl: Mouse anti GAPDH(YM8394 1:5000) Secondary : Dylight 800, Goat Anti Rabbit IgG

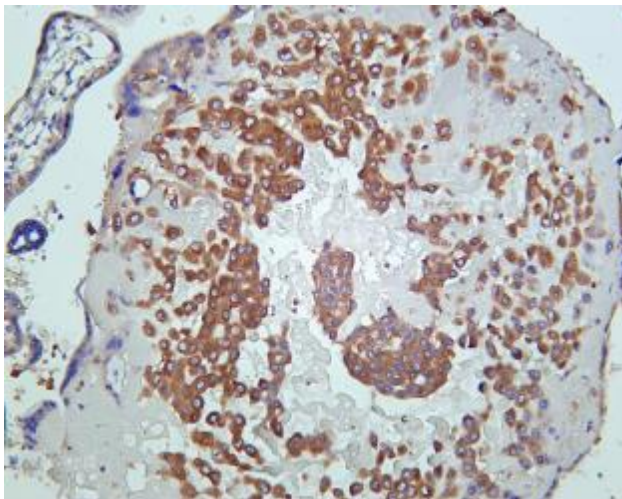




Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PI3-Kinase p85 α antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HepG2 Lane 3: Mouse brain Lane 4: Rat brain Predicted band size: 84kDa Observed band size: 84kDa

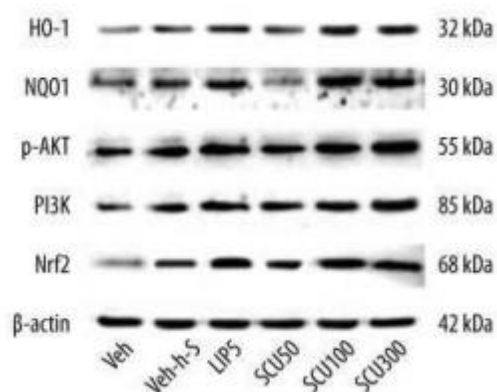


Mouse testis was stained with Anti-PI3-Kinase p85 α rabbit Antibody



Human placenta was stained with Anti-PI3-Kinase p85 α rabbit Antibody





Fan, Hua, et al. "Scutellarin Prevents Nonalcoholic Fatty Liver Disease (NAFLD) and Hyperlipidemia via PI3K/AKT-Dependent Activation of Nuclear Factor (Erythroid-Derived 2)-Like 2 (Nrf2) in Rats." Medical science monitor: international medical journal of experimental and clinical research 23 (2017): 5599.

