

PI 3 Kinase P85 α (PT0082R) PT™ Rabbit mAb

CatalogNo: YM8045 **Recombinant** 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- WB, IHC, IF, IP, ELISA

MW

- 84kD (Calculated)
- 84kD (Observed)

Isotype

- IgG, Kappa

Recommended Dilution Ratios

IHC 1:200-1000**WB 1:1000-5000****IF 1:200-1000****ELISA 1:5000-20000****IP 1:50-200**

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Basic Information

Clonality Monoclonal**Clone Number** PT0082R

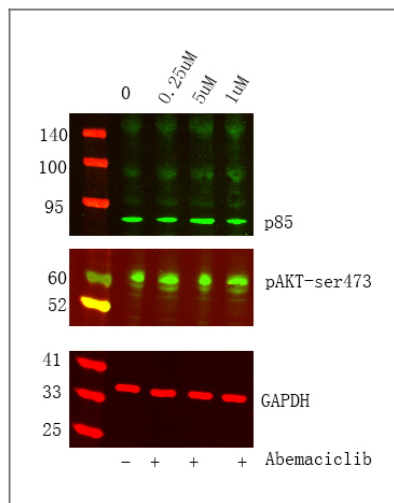
Immunogen Information

Specificity Endogenous

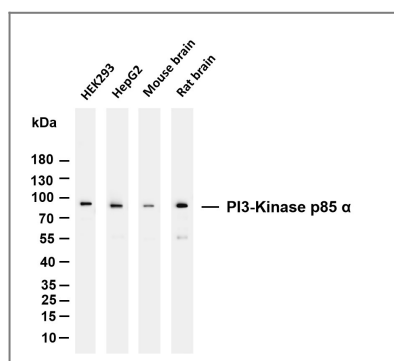
| Target Information

Gene name	PIK3R1		
Protein Name	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		
	Organism	Gene ID	UniProt ID
	Human	5295 ;	P27986 ;
	Mouse	18708 ;	P26450 ;
	Rat	25513 ;	Q63787 ;
Cellular Localization	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),		

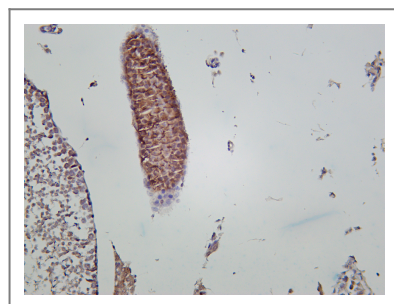
| Validation Data



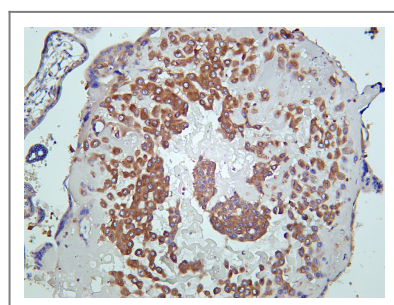
Western Blot analysis using HepG2 whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PI3-Kinase p85 α rabbit mAb (YM8045) diluted at 1:2000. anti-AKT (Phospho Ser473) Rabbit mAb(YM8304) diluted at 1:2000. Loading contrl: Mouse anti GAPDH(YM8394 1:5000) Secondary : Dylight 800, Goat Anti Rabbit IgG(RS23920 1:10000) Dylight 680, Goat Anti Rabbit IgG (RS23720 1:10000)



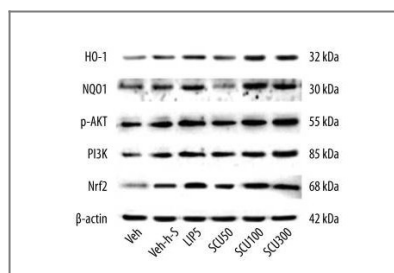
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PI3-Kinase p85 α antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HepG2 Lane 3: Mouse brain Lane 4: Rat brain Predicted band size: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



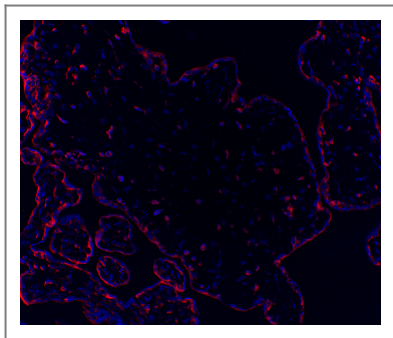
Mouse testis was stained with Anti-PI3-Kinase p85 α rabbit Antibody



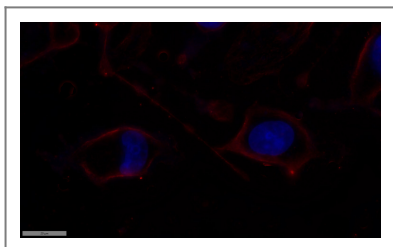
Human placenta was stained with Anti-PI3-Kinase p85 α rabbit Antibody



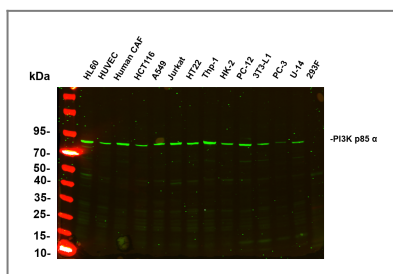
Fan, Hua, et al. "Scutellarin Prevents Nonalcoholic Fatty Liver Disease (NAFLD) and Hyperlipidemia via PI3K/AKT-Dependent Activation of Nuclear Factor (Erythroid-Derived 2)-Like 2 (Nrf2) in Rats." Medical science monitor: international medical journal of experimental and clinical research 23 (2017):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



Immunofluorescence analysis of Human placenta



Immunofluorescence analysis of MCF7 cell. 1, primary Antibody was diluted at 1:100(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - AFuor 594 Secondary antibody(catalog No: RS3611) was diluted at 1:500(room temperature, 50min).



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: HL60 - Human promyelocytic leukemia cell Lane2: HUVEC - Human umbilical vein endothelial cell Lane3: Human CAF - Human cancer-associated fibroblast Lane4: HCT116 - Human colorectal carcinoma Lane5: A549 - Human lung carcinoma Lane6: Jurkat - Human T lymphocyte leukemia Lane7: HT22 - Mouse hippocampal neuronal Lane8: Thp-1 - Human monocytic leukemia Lane9: HK-2 - Human proximal tubular epithelial Lane10: PC-12 - Rat adrenal pheochromocytoma Lane11: 3T3-L1 - Mouse embryonic fibroblast Lane12: PC-3 - Human prostate adenocarcinoma Lane13: U-14 - Mouse cervical carcinoma Lane14: 293F - HEK293 derivative, adapted for suspension culture Predicted band size: 84kDa Observed band size: 84kDa

Contact information

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