Immunotag™ PI 3-kinase p85α Polyclonal Antibody

Antibody Specification

Catalog No.	ITM3415
Product Description	Immunotag™ PI 3-kinase p85α Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PI 3-kinase p8500α
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p
Recommended Dilution	WB: 1:1000-2000 IHC: 1:200-500
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	Recombinant Protein of PI 3-kinase p85α
Specificity	The antibody detects endogenous PI 3-kinase p85α protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Gene Name	PIK3R1
Accession No.	P27986 P26450
Alternate Names	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

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Description	phosphoinositide-3-kinase regulatory subunit 1(PIK3R1) Homo sapiens 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],
Cell Pathway/ Category	ErbB_HER,Chemokine,Phosphatidylinositol signaling system,mTOR,Apoptosis_Inhibition,Apoptosis_Mitochondrial,Apoptosis_Overview,VEGF,Focal adhesion,Toll_Like,Jak_STAT,Natural killer cell mediated cytotoxicity,T_Cell_Receptor,B_Cell_Antigen,Fc epsilon RI,Fc gamma R-mediated phagocytosis,Leukocyte transendothelial migration,Neurotrophin,Regulates Actin and Cytoskeleton,Insulin_Receptor,Progesterone-mediated oocyte maturation,Type II diabetes mellitus,Aldosterone-regulated sodium reabsorption,Pathways in cancer,Colorectal cancer,Renal cell carcinoma,Pancreatic cancer,Endometrial cancer,Glioma,Prostate cancer,Melanoma,Chronic myeloid leukemia,Acute myeloid leukemia,Small cell lung cancer,Non-small cell lung cancer,
Protein Expression	Brain,Epithelium,Lung,Placenta,Skeletal muscle,
Subcellular 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,
Protein 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).,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.