

Rabbit Anti-phospho-PIK3R1 (Tyr368) antibody

SL5538R

Product Name:	phospho-PIK3R1 (Tyr368)
Chinese Name:	磷酸化磷脂酰肌醇激酶抗体
Alias:	PIK3R1(phospho Y368); PI3-kinase p85 subunit alpha; GRB 1; GRB1; p85 alpha; p85; P85A_HUMAN; Phosphatidylinositol 3 kinase associated p 85 alpha; Phosphatidylinositol 3 kinase regulatory 1; Phosphatidylinositol 3 kinase regulatory subunit polypeptide 1 (p85 alpha); Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha; Phosphatidylinositol 3-kinase regulatory subunit alpha; Phosphoinositide 3 kinase regulatory subunit 1 (alpha); Phosphoinositide 3 kinase regulatory subunit 1 (p85 alpha); Phosphoinositide 3 kinase regulatory subunit polypeptide 1 (p85 alpha); PI3 kinase p85 subunit alpha; PI3-kinase regulatory subunit alpha; PI3-kinase regulatory subunit alpha; PI3-kinase subunit p85-alpha; PI3K; PI3K regulatory subunit alpha; PtdIns-3-kinase regulatory subunit p85-alpha.
Ouganism Spains	Rabbit
Organism Species: Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	84kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human PIK3R1 around the phosphorylation site of Tyr368:GD(p-Y)TL
Lsotype:	IgG
Purification:	affinity purified by Protein A

Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
T uplyieu.	The enzyme phosphatidylinositol 3 kinase (PI3 kinase) is a lipid kinase that generates phosphatidylinositol 3, 4, 5-triphosphate in response to receptor activation in many signal transduction pathways. Class IA PI3Ks exist as a heterodimer of a catalytic 110 kDa (p110) and a regulatory p85 subunit (e.g. p85 alpha). p85 alpha is an adaptor molecule that regulates the activity of the catalytic p110 subunit by binding to phosphorylated receptor tyrosine kinases (RTKs) through its SH2 domain and mediating the interaction between p110 and the plasma membrane. p85 alpha is necessary for insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. 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. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling. Subunit:
Product Detail:	Heterodimer of a regulatory subunit PIK3R1 and a p110 catalytic subunit (PIK3CA, PIK3CB or PIK3CD). Interacts with FER. Interacts (via SH2 domain) with TEK/TIE2 (tyrosine phosphorylated). Interacts with PTK2/FAK1 (By similarity). Interacts with phosphorylated TOM1L1. Interacts with phosphorylated LIME1 upon TCR and/or BCR activation. Interacts with SOCS7. Interacts with RUFY3. Interacts (via SH2 domain) with CSF1R (tyrosine phosphorylated). Interacts with LYN (via SH3 domain); this enhances enzyme activity (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. Interacts with FASLG, KIT and BCR. Interacts with AXL, FGFR1, FGFR2, FGFR3 and FGFR4 (phosphorylated). Interacts with FGR and HCK. Interacts with PDGFRA (tyrosine phosphorylated) and PDGFRB (tyrosine phosphorylated). Interacts with NTRK1 (phosphorylated upon ligand-binding).
	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).

Post-translational modifications:

Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but impairs association with CD28 and CD3Z upon T-cell activation. Phosphorylated. Tyrosine phosphorylated in response to signaling by FGFR1, FGFR2, FGFR3 and FGFR4. Phosphorylated by CSF1R. Phosphorylated by ERBB4. Phosphorylated on tyrosine residues by TEK/TIE2. Dephosphorylated by PTPRJ. Phosphorylated by PIK3CA at Ser-608; phosphorylation is stimulated by insulin and PDGF. The relevance of phosphorylation by PIK3CA is however unclear. Phosphorylated in response to KIT and KITLG/SCF. Phosphorylated by FGR.

Similarity:

doiotech.cox Belongs to the PI3K p85 subunit family.

Contains 1 Rho-GAP domain.

Contains 2 SH2 domains.

Contains 1 SH3 domain.

SWISS:

P27986

Gene ID:

5295

Database links:

Entrez Gene: 5295Human

Entrez Gene: 18708Mouse

Entrez Gene: 25513Rat

Omim: 171833Human

SwissProt: P27986Human

SwissProt: P26450Mouse

SwissProt: Q63787Rat

Unigene: 132225Human

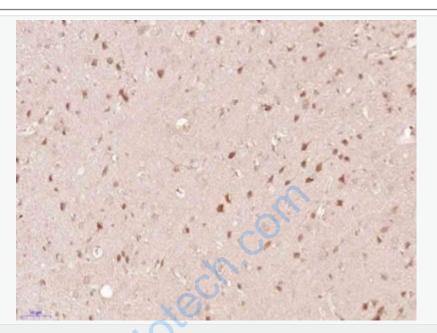
Unigene: 604502Human

Unigene: 259333Mouse

Unigene: 10599Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PIK3R1(Tyr368)) Polyclonal Antibody, Unconjugated (SL5538R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.