




## Rabbit Anti-phospho-PI3 kinase p85 alpha + gamma (Tyr467 + Tyr199) antibody

SL3332R

<b>Product Name:</b>	phospho-PI3 kinase p85 alpha + gamma (Tyr467 + Tyr199)
<b>Chinese Name:</b>	磷酸化磷脂酰肌醇激酶/PI3 Kinase P85 $\alpha$ / $\gamma$ 抗体
<b>Alias:</b>	PI3 kinase p85 alpha (phospho Tyr467); PI3 kinase p55 gamma (phospho Tyr199); phospho-PI3 kinase p85 alpha / gamma (Tyr467 / Tyr199); PI3-kinase p85 subunit alpha; PI3-kinase p85 subunit gamma; GRB1; p50 alpha; p55 alpha; p85 alpha; p85; Phosphatidylinositol 3 kinase associated p85 alpha; Phosphatidylinositol 3 kinase regulatory 1; Phosphatidylinositol 3 kinase regulatory alpha subunit; Phosphoinositide 3 kinase regulatory subunit polypeptide 1 (p85 alpha); PI3 kinase p85 alpha subunit; PI3 kinase p85 subunit alpha; PI3K; PIK3R1; PtdIns 3 kinase p85 alpha; P55G_HUMAN; PtdIns 3 kinase p85 alpha; SH3_PI3K_p85alpha; P85A_HUMAN; PI 3-kinase p85 $\alpha$ ; PI 3-kinase p85 $\alpha$ ; PI 3-kinase p85- $\alpha$ .
<b>文献引用</b> 	<p><b>Specific References(3)</b> SL3332R has been referenced in 3 publications.</p> <p><b>[IF=3.73]</b>Padiya, Raju, et al. "Garlic Attenuates Cardiac Oxidative Stress via Activation of PI3K/AKT/Nrf2-Keap1 Pathway in Fructose-Fed Diabetic Rat." PLOS ONE 9.5 (2014): e94228.<b>WB;Rat.</b> <a href="#">PubMed:24796753</a></p> <p><b>[IF=1.84]</b>Sun, Yan, et al. "Thyroid hormone inhibits the proliferation of piglet Sertoli cell via PI3K signaling pathway." Theriogenology (2014).<b>WB;</b> <a href="#">PubMed:25284282</a></p> <p><b>[IF=3.35]</b>Jeong, Heesoo, Yanan Liu, and Hyun-Sook Kim. "Dried plum and chokeberry ameliorate d-galactose-induced aging in mice by regulation of PI3k/Akt-mediated Nrf2 and Nf-kB pathways." Experimental Gerontology (2017).<b>WB;Mouse.</b> <a href="#">PubMed:28502776</a></p>

<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
<b>Applications:</b>	WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 Flow-Cyt=1ug/test IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	54kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human PI3 kinase p85 alpha around the phosphorylation site of p85 Tyr467:RL(p-Y)EE
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>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.</p> <p><b>Function:</b> 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.</p> <p><b>Subunit:</b> 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. Interacts with phosphorylated TOM1L1. Interacts with phosphorylated LIME1 upon TCR and/or BCR activation.</p>

Interacts with SOCS7. Interacts with RUFY3. Interacts (via SH2 domain) with CSF1R (tyrosine phosphorylated). Interacts with LYN (via SH3 domain); this enhances enzyme activity. 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 ERBB4 (phosphorylated). Interacts with NTRK1 (phosphorylated upon ligand-binding).

**Subcellular Location:**

Cytoplasmic.

**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:**

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: 5295](#) Human

[Entrez Gene: 8503](#) Human

[Entrez Gene: 18708](#) Mouse

[Entrez Gene: 18710](#) Mouse

[Entrez Gene: 25513](#) Rat

[Entrez Gene: 60664](#) Rat

[Omim: 171833](#) Human

[Omim: 606076](#) Human

[SwissProt: P27986](#) Human

[SwissProt: Q92569](#) Human

[SwissProt: P26450](#) Mouse

[SwissProt: Q64143](#) Mouse

[SwissProt: Q63787](#) Rat

[SwissProt: Q63789](#) Rat

[Unigene: 132225](#) Human

[Unigene: 170510](#) Human

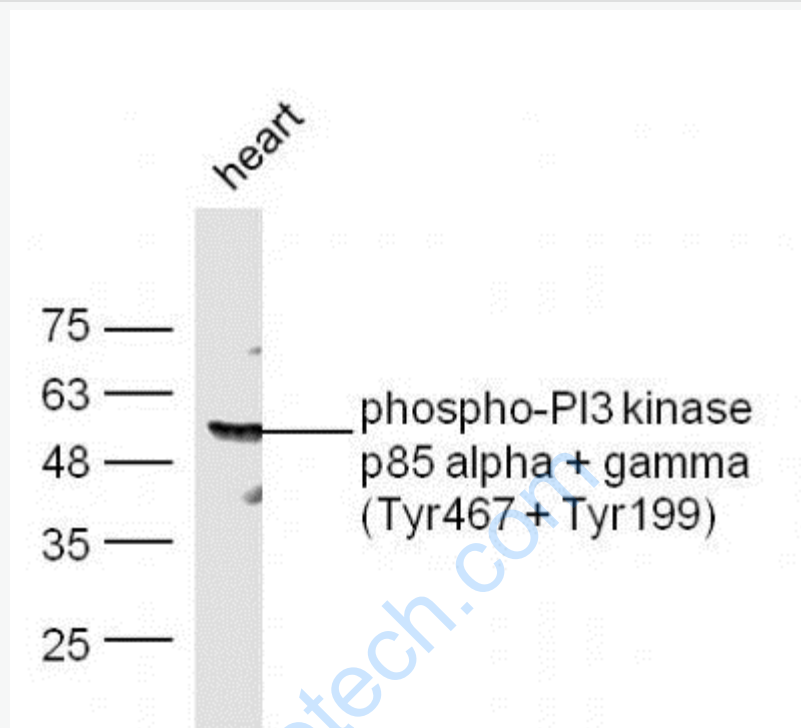
[Unigene: 253819](#) Mouse

[Unigene: 44448](#) Rat

**Important Note:**

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

Picture:



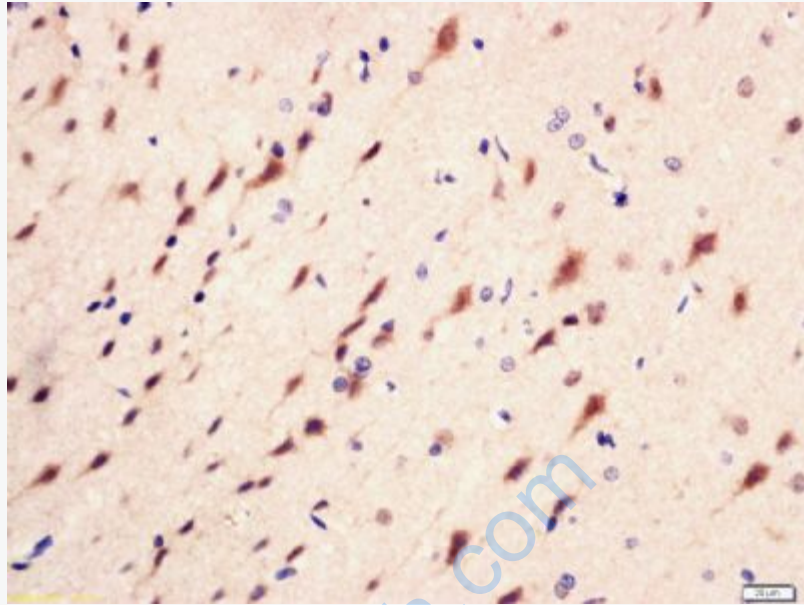
Sample: Heart (Mouse) Lysate at 30 ug

Primary: Anti- phospho-PI3 kinase p85alpha+gamma(Tyr467+Tyr199) (SL3332R)  
at 1/300 dilution

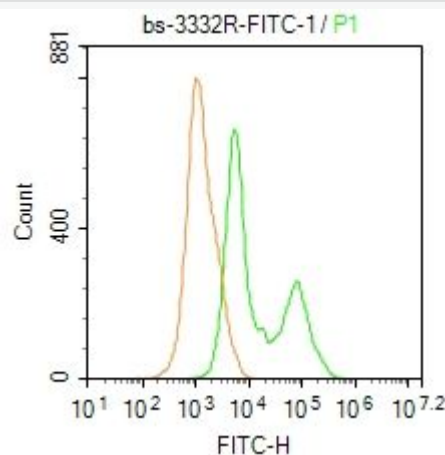
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 54 kD

Observed band size: 54 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-phospho-PI3 kinase p85 alpha+gamma (Tyr467+Tyr199) Polyclonal Antibody, Unconjugated(SL3332R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Molt4.

Primary Antibody (green line): Rabbit Anti- phospho-PI3 kinase p85 alpha + gamma (Tyr467 + Tyr199)/FITC Conjugated antibody (SL3332R)

Dilution: 1 $\mu$ g /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG-FITC .

#### Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at-20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. The cells were stained with Primary Antibody for 30 min at room temperature. Acquisition of 20,000 events was performed.