

## Rabbit Anti-phospho-PIK3 gamma (Ser1101)antibody

SL10277R

**Product Name** phospho-PIK3 gamma (Ser1101)

**Chinese Name** 磷酸化磷脂酰肌醇激酶 PIK3- $\gamma$  抗体

**Alias**

PK3CG\_HUMAN; Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform 1; Phosphatidylinositol 3-kinase catalytic subunit gamma; PI3K-gamma; PI3Kgamma; PtdIns-3-kinase subunit gamma; Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit gamma; PtdIns-3-kinase subunit p110-gamma; p110gamma; Phosphoinositide-3-kinase catalytic gamma polypeptide; Serine/threonine protein kinase; Phosphatidylinositol 3 kinase; p120-PI3K; p120 PI3K; 5-bisphosphate 3-kinase 110 kDa catalytic subunit gamma; 5-bisphosphate 3-kinase catalytic subunit gamma isoform; p110 gamma; Phosphatidylinositol 3-kinase catalytic 110 kD gamma; Phosphatidylinositol 3 kinase gamma, p110 gamma; Phosphatidylinositol 3-kinase catalytic, gamma polypeptide; Phosphatidylinositol 4 5 bisphosphate 3 kinase 110 kDa catalytic subunit gamma; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit gamma; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit gamma isoform; Phosphatidylinositol-4; Phosphoinositide 3 kinase catalytic subunit gamma; Phosphoinositide 3 kinase gamma catalytic subunit; PI3-kinase subunit gamma; PI3K; Pik3cg; PtdIns-3-kinase subunit gamma; PtdIns-3-kinase subunit p110-gamma; Serine/threonine kinase PIK3CG.

**Product Type** Phosphorylated anti

**Research Area**

Tumour immunology Signal transduction Kinases and Phosphatases G protein-coupled receptor

**Immunogen Species**

Rabbit

**Clonality**

Polyclonal

**React Species**

(predicted: Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep, )

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA

(Paraffin sections need antigen repair)

**Applications**

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight**

121kDa

**Cellular localization**

cytoplasmic The cell membrane



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<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthesised phosphopeptide derived from human PIK3 gamma around the phospho site of Ser1101: KH(p-S)A
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a>

This gene encodes a protein that belongs to the pi3/pi4-kinase family of proteins. The gene product phosphorylates phosphoinositides on the 3-hydroxyl group of the inositol ring. It is an important component of extracellular signals, including those elicited by E-cadherin-mediated cell-cell adhesion, which plays an important role in maintenance of the structural and functional integrity of epithelia. In addition to promoting assembly of adherens junctions, the protein is thought to play a pivotal role in the regulation of cytotoxicity in NK cells. The gene is located in a commonly deleted segment of chromosome 7 p13, which was first identified in myeloid leukemias. [provided by RefSeq, Jul 2008].

**Function:**

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns(4,5)P<sub>2</sub> (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP<sub>3</sub>). PIP<sub>3</sub> plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling pathways involved in cell growth, survival, proliferation, motility and morphology. Links G-protein coupled receptor activation to PIP<sub>3</sub> production. Involved in immune, inflammatory and allergic responses. Modulates chemotaxis to inflammatory sites and in response to chemoattractant agents. May control leukocyte chemotaxis and migration by regulating the spatial accumulation of PIP<sub>3</sub> and by regulating the organization of the leading edge. Controls motility of dendritic cells. Together with PIK3CD is involved in natural killer (NK) cell development and migration towards the sites of infection. Participates in T-lymphocyte migration. Regulates T-lymphocyte proliferation and cytokine production. Together with PIK3CD participates in T-lymphocyte development. Required for B-lymphocyte development and signaling. Together with PIK3CD participates in neutrophil respiratory burst. Together with PIK3CB is involved in neutrophil chemotaxis and extravasation. Together with PIK3CB promotes platelet aggregation and thrombosis. Regulates alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) adhesive function in platelets through activation of P2Y<sub>12</sub> through a lipid kinase activity-independent mechanism. May have also a lipid kinase activity-dependent function in platelet aggregation. Involved in endothelial progenitor cell migration. Acts as a regulator of cardiac contractility. Modulates cardiac contractility by anchoring protein kinase A to the membrane. Promotes PDE3B activation, reducing cAMP levels. Regulates cardiac contractility also by promoting beta-adrenergic receptor internalization by binding to ADRBK1 and by non-muscle tropomyosin phosphorylation. Together with serine/threonine protein kinase activity: both lipid and protein kinase activities are required for beta-adrenergic receptor endocytosis. May also have a scaffolding role in modulating cardiac contractility. Contri

**Product Detail**

hypertrophy under pathological stress. Through simultaneous binding of PDE3B to RAPGEF3 assembled in a signaling complex in which the PI3K gamma complex is activated by RAPGEF3 involved in angiogenesis.

**Subunit:**

Heterodimer of a catalytic subunit PIK3CG and a PIK3R5 or PIK3R6 regulatory subunit. Interacts with ADRBK1 through the PIK helical domain. Interaction with ADRBK1 is required for targeting to agonist-occupied receptor. Interacts with PDE3B. Interacts with TPM2. Interacts with EPHA8; required for integrin-mediated cell adhesion to substrate. Interacts with HRAS1; the interaction is required for recruitment and beta-gamma G protein dimer-dependent activation of the PI3K gamma complex PIK3CG:PIK3R6 (By similarity).

**Subcellular Location:**

Cytoplasm. Cell membrane.

**Tissue Specificity:**

Pancreas, skeletal muscle, liver and heart.

**Similarity:**

Belongs to the PI3/PI4-kinase family.

Contains 1 C2 PI3K-type domain.

Contains 1 PI3K-ABD domain.

Contains 1 PI3K-RBD domain.

Contains 1 PI3K/PI4K domain.

Contains 1 PIK helical domain.

**SWISS:**

P48736

**Gene ID:**

5294

**Database links:**

UniProtKB/Swiss-Prot: P48736.3

[Entrez Gene: 5294](#) Human

[Entrez Gene: 30955](#) Mouse

[Entrez Gene: 396979](#) Pig

[GenBank: AF327656](#) Human

[Omim: 601232](#) Human



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[SwissProt: P48736](#) Human

[SwissProt: Q9JHG7](#) Mouse

[SwissProt: O02697](#) Pig

[Unigene: 32942](#) Human

[Unigene: 101369](#) Mouse

[Unigene: 404021](#) Mouse