



Rabbit Anti-Phospho-PLC gamma 1 (Tyr771) antibody

SL3460R

Product Name:	Phospho-PLC gamma 1 (Tyr771)
Chinese Name:	磷酸化磷脂酶C γ 1抗体
Alias:	PLC 1; PLC 148; PLC gamma 1; PLC II; PLC1; PLC148; PLCG 1; PLCG1; PLCgamma1; PLCII; triphosphoinositide phosphodiesterase; 1 phosphatidyl D myo inositol 4 5 biphosphate; 1 phosphatidylinositol 4 5 biphosphate; 1 phosphatidylinositol 4 5 biphosphate phosphodiesterase gamma 1; inositoltrisphosphohydrolase; monophosphatidylinositol phosphodiesterase; phosphatidylinositol phospholipase C; phosphodiesterase gamma 1; phosphoinositidase C; phosphoinositide phospholipase C; Phospholipase C 148; phospholipase C gamma 1 (formerly subtype 148); Phospholipase C gamma 1; phospholipase C-148; PLCG1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,
Applications:	WB=1:500-2000ELISA=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:	148kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human PLC gamma 1 around the phosphorylation site of Tyr771:PD(p-Y)GA
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:	PubMed
Product Detail:	<p>The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008].</p> <p>Function: Mediates the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). Plays an important role in the regulation of intracellular signaling cascades. Becomes activated in response to ligand-mediated activation of receptor-type tyrosine kinases, such as PDGFRA, PDGFRB, FGFR1, FGFR2, FGFR3 and FGFR4. Plays a role in actin reorganization and cell migration.</p> <p>Subunit: Interacts with AGAP2 via its SH3 domain. Interacts (via SH2 domain) with RET. Interacts with FLT1 (tyrosine-phosphorylated). Interacts (via SH2 domain) with FGFR1, FGFR2, FGFR3 and FGFR4 (phosphorylated). Interacts with LAT (phosphorylated) upon TCR activation. Interacts (via SH3 domain) with the Pro-rich domain of TNK1. Associates with BLNK, VAV1, GRB2 and NCK1 in a B-cell antigen receptor-dependent fashion. Interacts with CBLB in activated T-cells; which inhibits phosphorylation. Interacts with SHB. Interacts (via SH3 domain) with the Arg/Gly-rich-flanked Pro-rich domains of KHDRBS1/SAM68. This interaction is selectively regulated by arginine methylation of KHDRBS1/SAM68. Interacts with INPP5D/SHIP1, THEMIS and CLNK. Interacts with AXL, FLT4 and KIT. Interacts with RALGPS1. Interacts (via SH3 domain) with HEV ORF3 protein. Interacts (via the SH2 domains) with VIL1 (phosphorylated at C-terminus tyrosine phosphorylation sites). Interacts (via SH2 domain) with PDGFRA and PDGFRB (tyrosine phosphorylated). Interacts with PIP5K1C (By similarity). Interacts with NTRK1 and NTRK2 (phosphorylated upon ligand-binding). Interacts with SYK; activates PLCG1. Interacts with GRB2, LAT and THEMIS upon TCR activation in thymocytes. Interacts with TESPA1; the association is increased with prolonged stimulation of the TCR and may facilitate the assembly of the LAT signalosome.</p> <p>Subcellular Location: Cell projection, lamellipodium. Cell projection, ruffle. Note=Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.</p>

Post-translational modifications:

Tyrosine phosphorylated in response to signaling via activated FLT3, KIT and PDGFRA (By similarity). Tyrosine phosphorylated by activated FGFR1, FGFR2, FGFR3 and FGFR4. Tyrosine phosphorylated by activated FLT1 and KDR. Tyrosine phosphorylated by activated PDGFRB. The receptor-mediated activation of PLCG1 involves its phosphorylation by tyrosine kinases, in response to ligation of a variety of growth factor receptors and immune system receptors. For instance, SYK phosphorylates and activates PLCG1 in response to ligation of the B-cell receptor. May be dephosphorylated by PTPRJ. Phosphorylated by ITK and TXK on Tyr-783 upon TCR activation in T-cells. Ubiquitinated by CBLB in activated T-cells.

Similarity:

Contains 1 C2 domain.

Contains 1 EF-hand domain.

Contains 2 PH domains.

Contains 1 PI-PLC X-box domain.

Contains 1 PI-PLC Y-box domain.

Contains 2 SH2 domains.

Contains 1 SH3 domain.

SWISS:

P19174

Gene ID:

5335

Database links:

[Entrez Gene: 5335](#)Human

[Entrez Gene: 18803](#)Mouse

[Entrez Gene: 25738](#)Rat

[Olim: 172420](#)Human

[SwissProt: P19174](#)Human

[SwissProt: Q62077](#)Mouse

[SwissProt: P10686](#)Rat

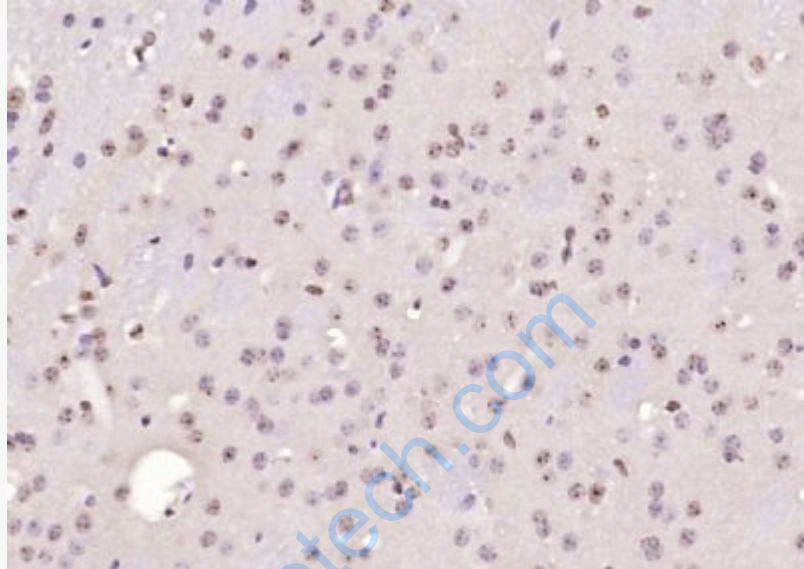
[Unigene: 268177](#)Human

[Unigene: 44463](#)Mouse

[Unigene: 11243](#)Rat

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 (mouse brain tissue); 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-PLC gamma 1 (Tyr771)) Polyclonal Antibody, Unconjugated (SL3460R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.