



Rabbit Anti-Phospho-PLCG 2 (Tyr753) antibody

SL5547R

Product Name:	Phospho-PLCG 2 (Tyr753)
Chinese Name:	磷酸化磷脂酶C γ 2抗体
Alias:	PLCG 2 (phospho Y753); p-PLCG 2 (phospho Y753); PLCG2(phospho Y753); PLCG 2(Phospho Tyr753); PLC 2; PLC gamma 2; PLC IV; PLCG2; 1 phosphatidylinositol 4 5 biphosphate phosphodiesterase gamma 2; EC 3.1.4.11; Phosphoinositide phospholipase C; Phospholipase C gamma 2; Phospholipase C, gamma 2 (phosphatidylinositol specific).
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
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:	139kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human PLC gamma 2 around the phosphorylation site of Tyr753:SL(p-Y)DV
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:	Enzymes of the phospholipase C family catalyze the hydrolysis of phospholipids to

yield diacylglycerols and water soluble phosphorylated derivatives of the lipid head groups. A number of these enzymes have specificity for phosphoinositides. Of the phosphoinositide specific phospholipase C enzymes, C beta is regulated by heterotrimeric G protein coupled receptors, while the closely related C gamma 1 and C gamma 2 enzymes are controlled by receptor tyrosine kinases. The C gamma 1 and C gamma 2 enzymes are composed of phospholipase domains that flank regions of homology to noncatalytic domains of the SRC oncogene product, SH2 and SH3.

Function:

The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. It is a crucial enzyme in transmembrane signaling.

Subunit:

Interacts (via SH2 domain) with CSF1R (tyrosine phosphorylated).

Post-translational modifications:

Phosphorylated on tyrosine residues by CSF1R. Phosphorylated on tyrosine residues by BTK and SYK; upon ligand-induced activation of a variety of growth factor receptors and immune system receptors. Phosphorylation leads to increased phospholipase activity.

DISEASE:

Defects in PLCG2 are the cause of familial cold autoinflammatory syndrome type 3 (FCAS3) [MIM:614468]. An autosomal dominant immune disorder characterized by the development of cutaneous urticaria, erythema, and pruritis in response to cold exposure. Affected individuals have variable additional immunologic defects, including antibody deficiency, decreased numbers of B cells, defective B cells, increased susceptibility to infection, and increased risk of autoimmune disorders.

Similarity:

- Contains 1 C2 domain.
- Contains 1 PH domain.
- Contains 1 PI-PLC X-box domain.
- Contains 1 PI-PLC Y-box domain.
- Contains 2 SH2 domains.
- Contains 1 SH3 domain.

SWISS:

P16885

Gene ID:

5336

Database links:

[Entrez Gene: 5336](#) Human

[Entrez Gene: 234779](#) Mouse

[Entrez Gene: 29337](#) Rat

[Omim: 600220](#) Human

[SwissProt: P16885](#) Human

[SwissProt: Q8CIH5](#) Mouse

[SwissProt: P24135](#) Rat

[Unigene: 413111](#) Human

[Unigene: 192699](#) Mouse

[Unigene: 9751](#) Rat

Important Note:

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