Product Name: PLC γ1 Rabbit Polyclonal Antibody
Catalog #: APRab16248

Summary

Production Name	PLC γ1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat,Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	PLCG1
Alternative Names	PLCG1; PLC1; 1-phosphatidylinositol 4; 5-bisphosphate phosphodiesterase gamma-1; PLC-148; Phosphoinositide phospholipase C-gamma-1; Phospholipase C-II; PLC-II; Phospholipase C-gamma-1; PLC-gamma-1
Gene ID	5335.0
SwissProt ID	P19174.The antiserum was produced against synthesized peptide derived from human PLCG1. AA range:736-785

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	150kD

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Background

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],catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Calcium.,domain:The SH3 domain mediates interaction with CLNK (By similarity). The SH3 domain also mediates interaction with RALGPS1.,function:PLC-gamma is a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase.,PTM:The receptor-mediated activation of PLC-gamma-1 and PLC-gamma-2 involves their phosphorylation by tyrosine kinases in response to ligation of a variety of growth factor receptors and immune system receptors.,PTM:Ubiquitinated by CBLB in activated T-cells.,similarity:Contains 1 C2 domain.,similarity:Contains 1 EF-hand domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 PI-PLC X-box domain.,similarity:Contains 1 PI-PLC Y-box domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 PH domains.,similarity:Contains 2 SH2 domains.,similarity:Contains 3 PH domains.,subunit:Interacts with AGAP2 via its SH3 domain (By similarity). Interacts with phosphorylated LAT upon TCR activation. Interacts with the Pro-rich domain of TNK1 via its SH3 domain. 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 its 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 and CLNK (By similarity). Interacts with RALGPS1. Interacts (via SH3 domain) with HEV ORF3 protein.,

Research Area

Inositol phosphate metabolism;ErbB_HER;Calcium;Phosphatidylinositol signaling system;VEGF;Natural killer cell mediated cytotoxicity;T_Cell_Receptor;Fc epsilon RI;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial migration;Neurotrophin;Vibrio cholerae infection;Epithelial cell signaling in Helicobacter pylori infection;Pathways in cancer;Glioma;Non-small cell lung cancer;

Image Data

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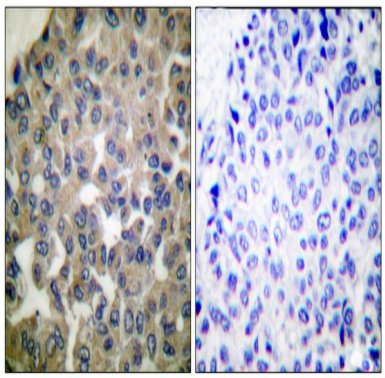
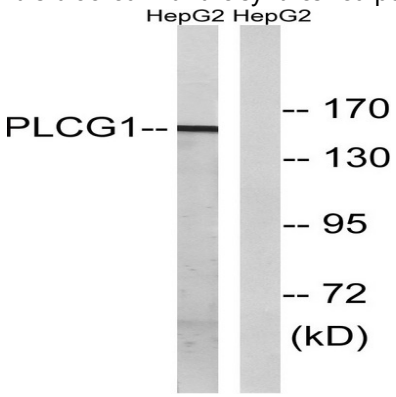
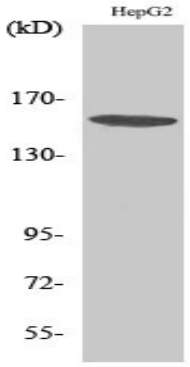


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using PLCG1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2, using PLCG1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using PLC γ1 Polyclonal Antibody diluted at 1： 2000

Note

For research use only.