
Product Name: Phospho-PLC γ 2 (Tyr753) Rabbit Polyclonal Antibody**Catalog #: APRab05288**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	148kDa

Antigen Information

Gene Name	PLCG2 PLCG2; 1-phosphatidylinositol 4; 5-bisphosphate phosphodiesterase gamma-2;
Alternative Names	Phosphoinositide phospholipase C-gamma-2; Phospholipase C-IV; PLC-IV; Phospholipase C-gamma-2; PLC-gamma-2
Gene ID	5336.0
SwissProt ID	P16885
Immunogen	The antiserum was produced against synthesized peptide derived from human PLCG2 around the phosphorylation site of Tyr753. AA range:721-770

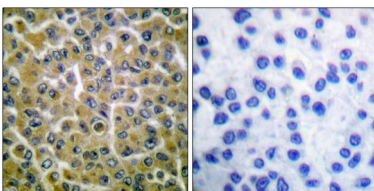
Background

The protein encoded by this gene is a transmembrane signaling enzyme that catalyzes the conversion of 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate to 1D-myo-inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG) using calcium as a cofactor. IP3 and DAG are second messenger molecules important for transmitting signals from growth factor receptors and immune system receptors across the cell membrane. Mutations in this gene have been found in autoinflammation, antibody deficiency, and immune dysregulation syndrome and familial cold autoinflammatory syndrome 3. [provided by RefSeq, Mar 2014],catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Calcium.,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.,PTM:Phosphorylated on tyrosine residues; upon ligand-induced activation of a variety of growth factor receptors and immune system receptors. Increases phospholipase activity.,similarity:Contains 1 C2 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 SH2 domains.,

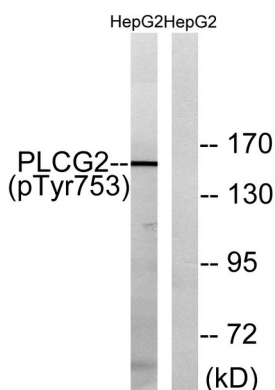
Research Area

Inositol phosphate metabolism;ErbB_HER;Calcium;Phosphatidylinositol signaling system;VEGF;Natural killer cell mediated cytotoxicity;B_Cell_Antigen;Fc epsilon R1;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;

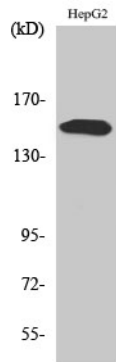
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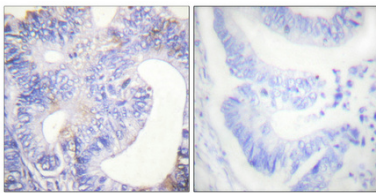
Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PLCG2 (Phospho-Tyr753) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with Na3VO4 0.3mM 40', using PLCG2 (Phospho-Tyr753) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-PLC $\gamma 2$ (Y753) Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100 (4°, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.