

## Summary

spho Tyr771) Rabbit Polyclonal Antibody
lonal Antibody
5A
se,Rat,Monkey

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storogo	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
Storage	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 around the phosphorylation site of Tyr771. AA range:736-785

# Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000
Molecular Weight	150kD



# Background

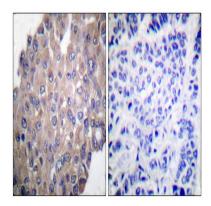
The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. 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-myoinositol 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 heparinbinding 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**

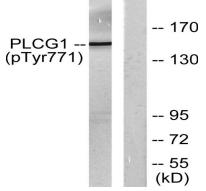
Inositol phosphate metabolism;ErbB\_HER;Calcium;Phosphatidylinositol signaling system;VEGF;Natural killer cell mediated cytotoxicity;T\_Cell\_Receptor;Fc epsilon RI;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial migration;Neurotrophin;Vibrio cholerae infection;Epithelial cell signaling in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

# Image Data

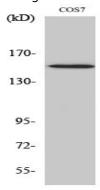




Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PLCG1 (Phospho-Tyr771) Antibody. The picture on the right is blocked with the phospho peptide.

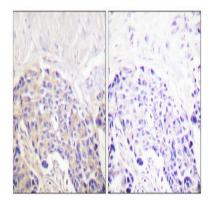


Western blot analysis of lysates from COS7 cells treated with EGF 200ng/ml 30 ', using PLCG1 (Phospho-Tyr771) Antibody. The lane on the right is blocked with the phospho peptide.

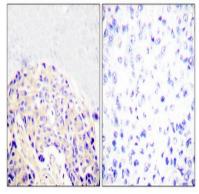


Western Blot analysis of various cells using Phospho-PLC y1 (Y771) Polyclonal Antibody





Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

# Note

For research use only.