



# PLC $\gamma$ 1 Polyclonal Antibody

|                           |  |
|---------------------------|--|
| <b>Catalog No</b>         | YP-Ab-02762  |
| <b>Isotype</b>            | IgG  |
| <b>Reactivity</b>         | Human;Mouse;Rat;Monkey   |
| <b>Applications</b>       | WB;IHC;IF;ELISA  |
| <b>Gene Name</b>          | PLCG1  |
| <b>Protein Name</b>       | 1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1  |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human PLCG1. AA range:736-785  |
| <b>Specificity</b>        | PLC $\gamma$ 1 Polyclonal Antibody detects endogenous levels of PLC $\gamma$ 1 protein.  |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source</b>             | Polyclonal, Rabbit,IgG   |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.  |
| <b>Dilution</b>           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200   |
| <b>Concentration</b>      | 1 mg/ml  |
| <b>Purity</b>             | $\geq$ 90%   |
| <b>Storage Stability</b>  | -20°C/1 year   |
| <b>Synonyms</b>           | 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   |
| <b>Observed Band</b>      | 150kD  |
| <b>Cell Pathway</b>       | Cell projection, lamellipodium . Cell projection, ruffle . Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment. .  |
| <b>Tissue Specificity</b> | Brain,Epithelium,Testis,Vein,  |
| <b>Function</b>           | 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.,simil

**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],

**matters needing attention**

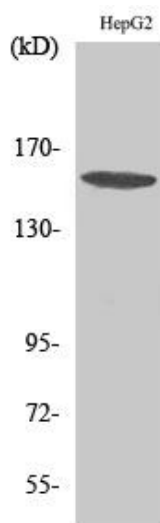
Avoid repeated freezing and thawing!

**Usage suggestions**

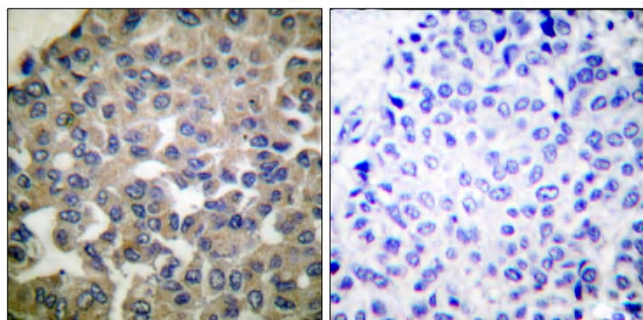
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



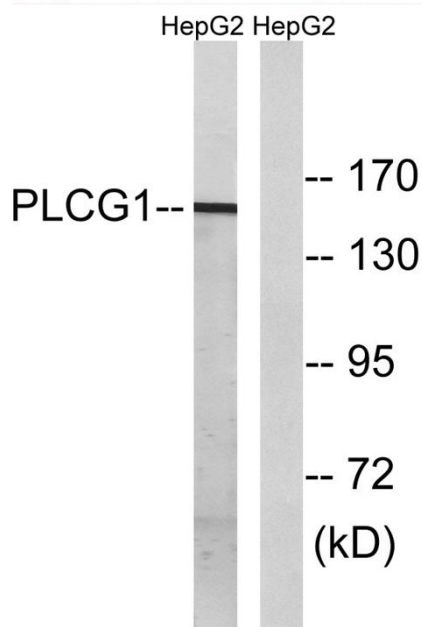
## Products Images



Western Blot analysis of various cells using PLC  $\gamma$ 1 Polyclonal Antibody diluted at 1:2000



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.