

PLC γ1 (phospho Tyr1253) Polyclonal Antibody

Catalog No: YP0315

Reactivity: Human; Mouse; Rat

Applications: WB;IHC

Target: PLCG1

Fields: >>Inositol phosphate metabolism;>>Metabolic pathways;>>EGFR tyrosine

kinase inhibitor resistance;>>ErbB signaling pathway;>>Ras signaling

pathway;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>Chemokine

signaling pathway;>>NF-kappa B signaling pathway;>>HIF-1 signaling

pathway;>>Phosphatidylinositol signaling system;>>Phospholipase D signaling pathway;>>Axon guidance;>>VEGF signaling pathway;>>Neutrophil extracellular

trap formation;>>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling

pathway;>>Fc epsilon RI signaling pathway;>>Fc gamma R-mediated

phagocytosis;>>Leukocyte transendothelial migration;>>Neurotrophin signaling pathway;>>Inflammatory mediator regulation of TRP channels;>>Thyroid hormone signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Growth hormone synthesis, secretion and action;>>Parkinson

disease;>>Pathways of neurodegeneration - multiple diseases;>>Vibrio

Gene Name: PLCG1

Protein Name: 1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1

Human Gene Id: 5335

Human Swiss Prot F

P19174

No:

Mouse Gene Id: 18803

Mouse Swiss Prot

Q62077

No:

Rat Gene ld: 25738

Rat Swiss Prot No: P10686



Immunogen: The antiserum was produced against synthesized peptide derived from human

PLCG1 around the phosphorylation site of Tyr1253. AA range:1221-1270

Specificity: Phospho-PLC γ1 (Y1253) Polyclonal Antibody detects endogenous levels of

PLC y1 protein only when phosphorylated at Y1253.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000;IHC 1:50-300

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 150kD

Cell Pathway: 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;Leuko

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],

Function : 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

2/4



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

Subcellular Location:

Cell projection, lamellipodium . Cell projection, ruffle . Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment. .

Expression : Brain, Epithelium, Testis, Vein,

Tag: orthogonal

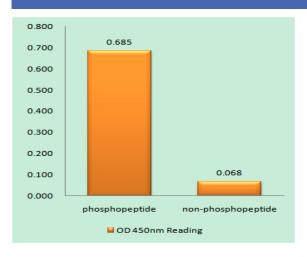
Sort : 12826

No4: 1

Host: Rabbit

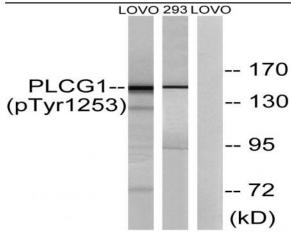
Modifications: Phospho

Products Images

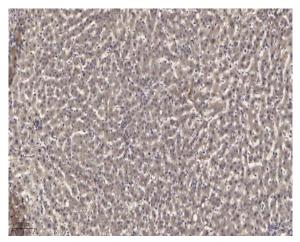


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PLCG1 (Phospho-Tyr1253) Antibody





Western blot analysis of lysates from LOVO cells treated with and 293 cells treated with heat shock, using PLCG1 (Phospho-Tyr1253) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).