

## PLC γ2 (phospho Tyr753) Polyclonal Antibody

Catalog No: YP0608

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: PLCG2

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

kinase inhibitor resistance;>>ErbB signaling pathway;>>Ras 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;>>Osteoclast differentiation;>>Platelet activation;>>Neutrophil extracellular trap formation;>>C-type lectin receptor signaling pathway;>>Natural killer cell mediated cytotoxicity;>>B 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;>>Vibrio

cholerae infection;>>Epithelial cell signaling in Helicobacter py

Gene Name: PLCG2

**Protein Name:** 1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2

Human Gene Id: 5336

**Human Swiss Prot** 

No:

Mouse Gene ld: 234779

**Mouse Swiss Prot** 

Q8CIH5

P16885

No:

Rat Gene ld: 29337

Rat Swiss Prot No: P24135



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

PLCG2 around the phosphorylation site of Tyr753. AA range:721-770

Specificity: Phospho-PLC γ2 (Y753) Polyclonal Antibody detects endogenous levels of PLC

γ2 protein only when phosphorylated at Y753.

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

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**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: 148kD

**Cell Pathway :** Inositol phosphate metabolism;ErbB\_HER;Calcium;Phosphatidylinositol

signaling system; VEGF; Natural killer cell mediated cytotoxicity; B Cell Antigen; Fc

epsilon RI;Fc gamma R-mediated phagocytosis;Leukoc

**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],

**Function :** 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.,

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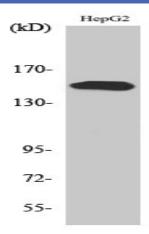
Subcellular Location :

intracellular,cytosol,plasma membrane,extracellular exosome,

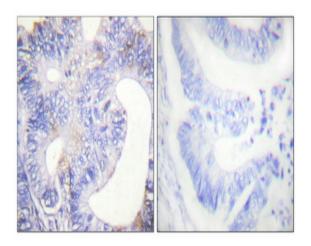
**Expression:** 

Lymph,Lymphoblast,Spleen,T-cell,

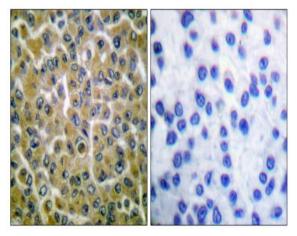
## **Products Images**



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

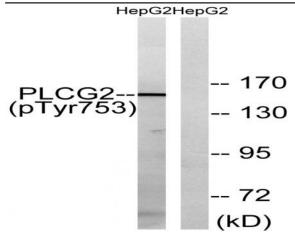


Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100(4° overnight). Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



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.