



# PLC $\gamma$ 2 (phospho Tyr753) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02406
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PLCG2
<b>Protein Name</b>	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PLCG2 around the phosphorylation site of Tyr753. AA range:721-770
<b>Specificity</b>	Phospho-PLC $\gamma$ 2 (Y753) Polyclonal Antibody detects endogenous levels of PLC 2 protein only when phosphorylated at Y753.
<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: 1/5000.. 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>	PLCG2; 1-phosphatidylinositol 4; 5-bisphosphate phosphodiesterase gamma-2; Phosphoinositide phospholipase C-gamma-2; Phospholipase C-IV; PLC-IV; Phospholipase C-gamma-2; PLC-gamma-2
<b>Observed Band</b>	148kD
<b>Cell Pathway</b>	intracellular,cytosol,plasma membrane,extracellular exosome,
<b>Tissue Specificity</b>	Lymph,Lymphoblast,Spleen,T-cell,
<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.,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.,



## 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],

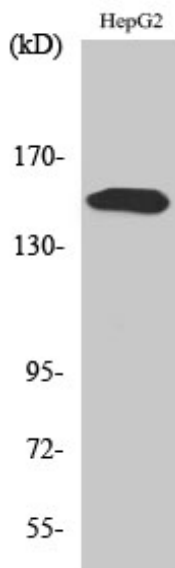
## matters needing attention

Avoid repeated freezing and thawing!

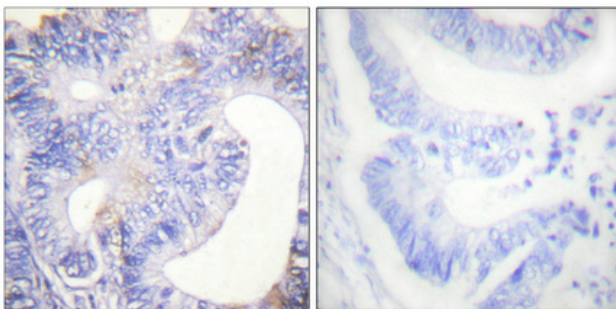
## Usage suggestions

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

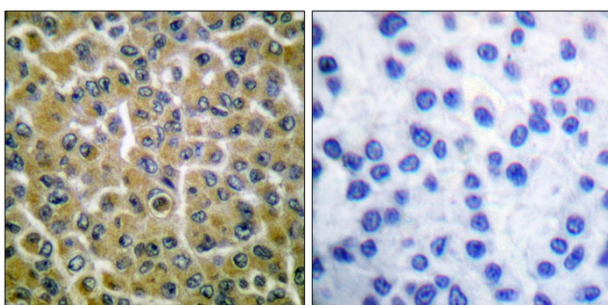
## Products Images



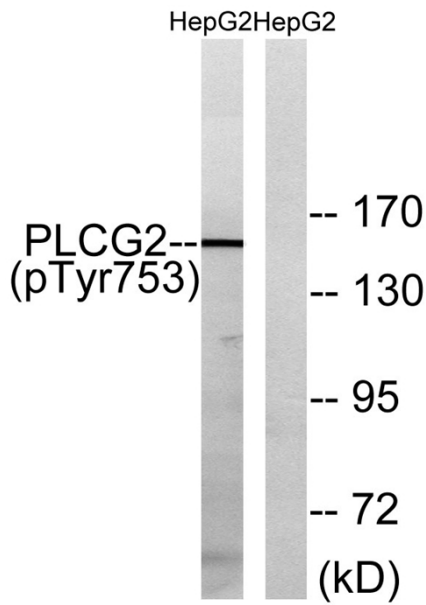
Western Blot analysis of various cells using Phospho-PLC  $\gamma$ 2 (Y753) Polyclonal Antibody



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.



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 Na<sub>3</sub>VO<sub>4</sub> 0.3mM 40', using PLCG2 (Phospho-Tyr753) Antibody. The lane on the right is blocked with the phospho peptide.