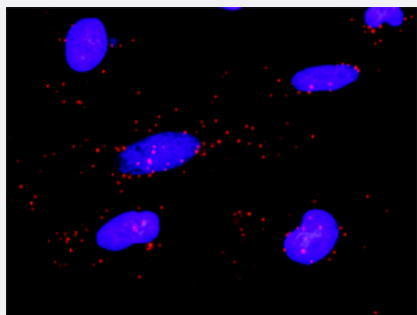


# PLCG2 & PLCG1 Protein Protein Interaction Antibody Pair

Catalog # DI0574

Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PLCG2 and PLCG1. HeLa cells were stained with anti-PLCG2 rabbit purified polyclonal antibody 1:1200 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

## Specification

### Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the PLCG2 protein, and the other against the PLCG1 protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

### Reactivity

Human

### Quality Control Testing

Protein protein interaction immunofluorescence result.  
Representative image of Proximity Ligation Assay of protein-protein interactions between PLCG2 and PLCG1. HeLa cells were stained with anti-PLCG2 rabbit purified polyclonal antibody 1:1200 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

### Supplied Product

Antibody pair set content:  
1. PLCG2 rabbit purified polyclonal antibody (100 ug)  
2. PLCG1 mouse monoclonal antibody (40 ug)  
\*Reagents are sufficient for at least 30-50 assays using recommended protocols.

### Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze-thaw cycle. Reagents should be returned to -20°C storage immediately after use.

## Applications

- *In situ* Proximity Ligation Assay (Cell)

## Gene Info — PLCG1

Entrez GeneID [5335](#)

Gene Name PLCG1

Gene Alias PLC-II, PLC1, PLC148, PLCgamma1

Gene Description phospholipase C, gamma 1

Omim ID [172420](#)

Gene Ontology [Hyperlink](#)

**Gene Summary** 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]

**Other Designations** 1-phosphatidyl-D-myo-inositol-4,5-bisphosphate|1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma 1|OTTHUMP00000031787|OTTHUMP00000178982|PLC-gamma-1|inositol trisphosphohydrolase|monophosphatidylinositol phosphodiesterase|phosphatidylinositol

## Gene Info — PLCG2

Entrez GeneID [5336](#)

Gene Name PLCG2

Gene Alias -

Gene Description phospholipase C, gamma 2 (phosphatidylinositol-specific)

Omim ID [600220](#)

Gene Ontology [Hyperlink](#)

## Gene Summary

Enzymes of the phospholipase C family catalyze the hydrolysis of phospholipids to yield diacylglycerols and water-soluble phosphorylated derivatives of the lipid head groups. A number of these enzymes have specificity for phosphoinositides. Of the phosphoinositide-specific phospholipase C enzymes, C-beta is regulated by heterotrimeric G protein-coupled receptors, while the closely related C-gamma-1 (PLCG1; MIM 172420) and C-gamma-2 enzymes are controlled by receptor tyrosine kinases. The C-gamma-1 and C-gamma-2 enzymes are composed of phospholipase domains that flank regions of homology to noncatalytic domains of the SRC oncogene product, SH2 and SH3.[supplied by OMIM]

## Other Designations

phospholipase C gamma 2|phospholipase C, gamma 2|phospholipase C, gamma 2 (phosphatidylinositol-specific)

## Pathway

- [B cell receptor signaling pathway](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Glioma](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Inositol phosphate metabolism](#)
- [Leukocyte transendothelial migration](#)
- [Leukocyte transendothelial migration](#)
- [Metabolic pathways](#)

- [Metabolic pathways](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Phosphatidylinositol signaling system](#)
- [T cell receptor signaling pathway](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)
- [Vibrio cholerae infection](#)
- [Vibrio cholerae infection](#)

## Disease

- [Bipolar Disorder](#)
- [Bipolar Disorder](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)

- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [HIV Infections](#)
- [Kidney Failure](#)
- [Mental Disorders](#)
- [Mental Disorders](#)
- [Multiple Sclerosis](#)
- [Ovarian cancer](#)
- [Tobacco Use Disorder](#)