

For Research Use Only

# PLCG1 Recombinant antibody

Catalog Number: 84941-1-RR



## Basic Information

|  |   |   |
|--|---|---|
| <b>Catalog Number:</b><br>84941-1-RR                           | <b>GenBank Accession Number:</b><br>5335      | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>5335                 | <b>CloneNo.:</b><br>242529A11                         |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>P19174                  | <b>Recommended Dilutions:</b><br>IF/ICC 1:125-1:500   |
| <b>Isotype:</b><br>IgG   | <b>Full Name:</b><br>phospholipase C, gamma 1 |   |
| <b>Immunogen Catalog Number:</b><br>AG27218                    | <b>Calculated MW:</b><br>149 kDa              |   |

## Applications

|  |   |
|--|---|
| <b>Tested Applications:</b><br>IF/ICC, ELISA | <b>Positive Controls:</b><br>IF/ICC : Jurkat cells, |
| <b>Species Specificity:</b><br>human         |   |

## Background Information

Phosphoinositide phospholipase C-gamma-1 (PLCG1) which belongs to the phosphoinositide-specific phospholipase C (PLC) family, is activated by many extracellular stimuli including hormones, neurotransmitters, and growth factors and modulates several cellular and physiological functions necessary for tumorigenesis such as cell survival, migration, invasion, and angiogenesis by generating inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG) via hydrolysis of phosphatidylinositol 4,5-bisphosphate (PIP2) (PMID: 9242915). Phosphorylation is one of the key mechanisms that regulate the activity of PLC. PLCγ is activated by both receptor and non-receptor tyrosine kinases (PMID: 2472218). PLCγ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLCγ at Tyr771, 783, and 1248 (PMID: 1708307). It has also been shown that PKA-mediated phosphorylation at Ser1248 is inhibitory to PLCγ 1 tyrosine phosphorylation and phospholipase activity in CD3-treated Jurkat cells (PMID: 1370476), suggesting that Ser1248 may be an allosteric regulator of PLCγ 1 activity.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

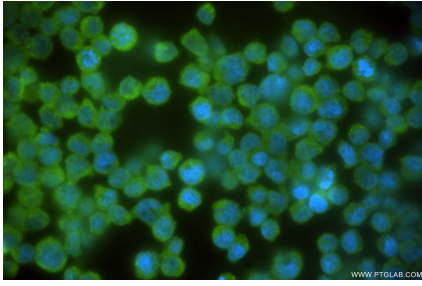
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using PLCG1 antibody (84941-1-RR, Clone: 242529A11 ) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).