

For Research Use Only

# PLCG1 Polyclonal antibody

Catalog Number: 28362-1-AP

1 Publications



## Basic Information

Catalog Number:

28362-1-AP

Size:

850 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG27218

GenBank Accession Number:

GeneID (NCBI):

5335

UNIPROT ID:

P19174

Full Name:

phospholipase C, gamma 1

Calculated MW:

149 kDa

Observed MW:

149 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human

Positive Controls:

WB : HEK-293 cells, Jurkat cells, MCF-7 cells

IF/ICC : Jurkat cells,

## 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. PLC  $\gamma$  is activated by both receptor and non-receptor tyrosine kinases (PMID: 2472218). PLC  $\gamma$  forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLC  $\gamma$  at Tyr771, 783, and 1248 (PMID: 1708307). It has also been shown that PKA-mediated phosphorylation at Ser1248 is inhibitory to PLC  $\gamma$  1 tyrosine phosphorylation and phospholipase activity in CD3-treated Jurkat cells (PMID: 1370476), suggesting that Ser1248 may be an allosteric regulator of PLC  $\gamma$  1 activity.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yao-Qi Zhou	37012514	Cell Oncol (Dordr)	WB

## 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

For technical support and original validation data for this product please contact:

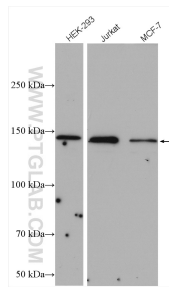
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

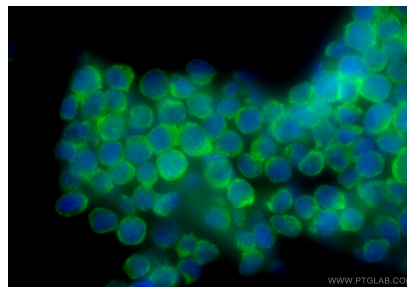
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 28362-1-AP (PLCG1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using PLCG1 antibody (28362-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).