

For Research Use Only

# Phospho-PLCG1 (Ser1248) Polyclonal antibody

Catalog Number: 29676-1-AP

1 Publications



## Basic Information

<b>Catalog Number:</b> 29676-1-AP	<b>GenBank Accession Number:</b> BC144136	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 100ul , Concentration: 300 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5335	<b>Recommended Dilutions:</b> WB 1:500-1:2000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P19174	
<b>Isotype:</b> IgG	<b>Full Name:</b> phospholipase C, gamma 1	
	<b>Observed MW:</b> 145 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : Calyculin A treated Jurkat cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> Human	
<b>Cited Species:</b> 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.

## Notable Publications

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

## Storage

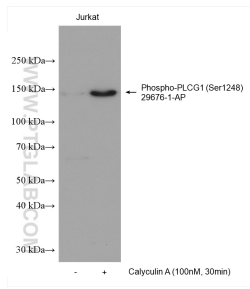
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

For technical support and original validation data for this product please contact:  
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E: proteintech@ptglab.com  
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## Selected Validation Data



Non-treated and Calyculin A treated Jurkat cells were subjected to SDS PAGE followed by western blot with 29676-1-AP (Phospho-PLCG1 (Ser1248) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.