

For Research Use Only

# Phospho-PLCG1 (Tyr783) Polyclonal antibody



Catalog Number: 29566-1-AP

## Basic Information

<b>Catalog Number:</b> 29566-1-AP	<b>GenBank Accession Number:</b> BC144136	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 600 µg/ml	<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> 150 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB: λ phosphatase treated Jurkat cells,
<b>Species Specificity:</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. 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.

## 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:

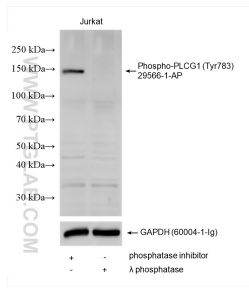
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## Selected Validation Data



Phosphatase inhibitor treated and  $\lambda$  phosphatase treated Jurkat cells were subjected to SDS PAGE followed by western blot with 29566-1-AP (Phospho-PLCG1 (Tyr783) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.