

For Research Use Only

# PLCG1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 84941-1-PBS



## Basic Information

Catalog Number:	84941-1-PBS	GenBank Accession Number:	Purification Method:
Size:	100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI):	Protein A purification
Source:	Rabbit	5335	CloneNo.:
Isotype:	IgG	UNIPROT ID:	242529A11
Immunogen Catalog Number:	AG27218	P19174	
		Full Name:	
		phospholipase C, gamma 1	
		Calculated MW:	
		149 kDa	

## Applications

**Tested Applications:**  
IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

84941-1-PBS targets PLCG1 as part of a matched antibody pair.

MP01700-2: 84941-3-PBS capture and 84941-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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

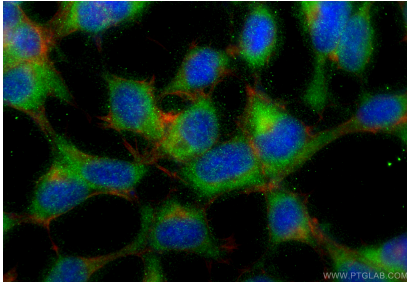
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

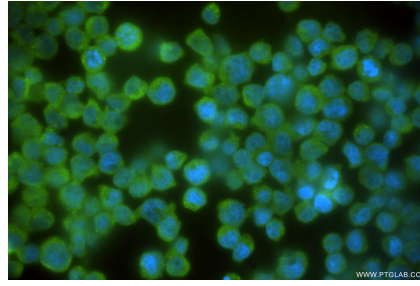
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

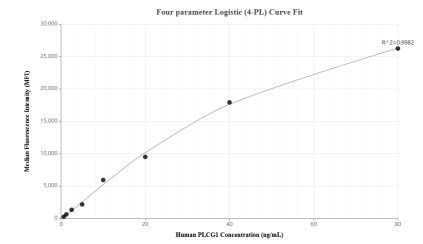
## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using PLCG1 antibody (84941-1-RR, Clone: 242529A11 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84941-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 84941-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01700-2, PLCG1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84941-3-PBS. Detection antibody: 84941-1-PBS. Standard: Ag27218. Range: 0.625-80 ng/mL.