

# PLCG1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 84941-1-PBS

## Basic Information

|                           |             |                           |                        |
|---------------------------|-------------|---------------------------|------------------------|
| Catalog Number:           | 84941-1-PBS | GenBank Accession Number: | Purification Method:   |
| Concentration:            | 1000 ug/ml  | 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

## Background Information

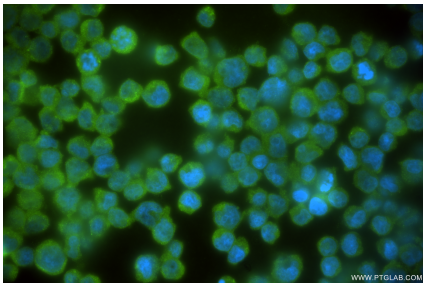
Phosphoinositide phospholipase C-gamma-1 (PLCG1) which belongs to the phosphoinositide-specific phospholipase C (PLC) family, is activated by many extracellular stimuli including hormones, neurotransmitters, and growth factors and modulates several cellular and physiological functions necessary for tumorigenesis 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

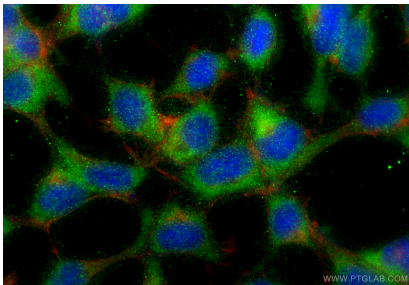
**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

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

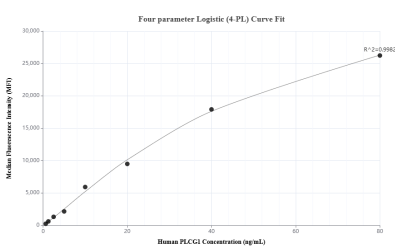
## Selected Validation Data



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



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.



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.