

# CoraLite® Plus 488-conjugated PLCG1 Recombinant monoclonal antibody

Catalog Number: CL488-84941

## Basic Information

## Catalog Number:

CL488-84941

## 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

## Purification Method:

Protein A purification

## CloneNo.:

242529A11

## Recommended Dilutions:

IF/ICC: 1:50-1:500

Excitation/Emission maxima  
wavelengths:

493 nm / 522 nm

## Applications

## Tested Applications:

IF/ICC

## Species Specificity:

human

## Positive Controls:

IF/ICC : HEK-293 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.

## Storage

## Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

## Storage Buffer:

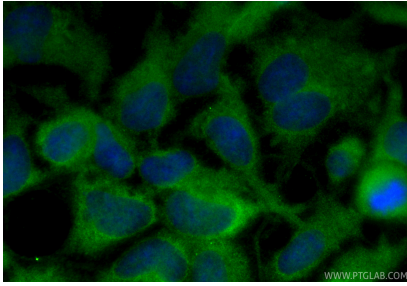
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage



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## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol)  
fixed HEK-293 cells using CoraLite® Plus 488  
PLCG1 antibody (CL488-84941, Clone: 242529A11 )  
at dilution of 1:200.