For Research Use Only

PLCG1 Recombinant antibody, PBS Only

Catalog Number:84941-4-PBS



Basic Information

Catalog Number: 84941-4-PBS

Nanodrop:

GenBank Accession Number:

GeneID (NCBI):

5335 100ug, Concentration: 1 mg/ml by

UNIPROT ID:

P19174 Full Name:

Rabbit phospholipase C, gamma 1

Isotype: Calculated MW: IgG 149 kDa Immunogen Catalog Number: Observed MW: AG27218 149 kDa

Purification Method: Protein A purfication

CloneNo.: 242529B11

Applications

Tested Applications:

WB, Indirect ELISA

Species Specificity: human, mouse, rat

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 tumorigeneses 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-biphosphate (PIP2) (PMID: 9242915). Phosphorylation is one of the key mechanisms that regulate the activity of PLC. PLC γ is activated by both receptor and non-receptor tyrosine kinases (PMID: 2472218). PLCy forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLCy at Tyr771, 783, and 1248 (PMID: 1708307). It has also been shown that PKAmediated phosphorylation at Ser1248 is inhibitory to PLCy 1 tyrosine phosphorylation and phospholipase activity in CD3-treated Jurkat cells (PMID: 1370476), suggesting that Ser1248 may be an allosteric regulator of PLCy 1 activity.

Storage

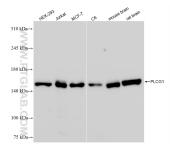
Storage:

Store at -80°C. Storage Buffer:

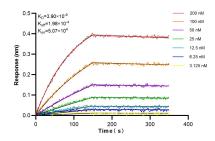
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in USA), or 1(312) 455-8498 (outside USA)

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84941-4-RR (PLCG1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84941-4-PBS in a different storage buffer formulation.



Biolayer interferometry (BLL) kinetic assays of 84941-4-RR against Human PLCG1 were performed. The affinity constant is 3.90 nM.