

Polyclonal Antibody to PLC1 - Purified

Alternate names:	DP3107, PLC-1
Catalog No.:	AP00567PU-N
Quantity:	0.5 mg
Concentration:	1 mg/ml
Background:	Phospholipase C is a key enzyme in many signal transduction pathways stimulated by cytokines, hormones, growth factors. It hydrolyses phosphatidylinositol-4,5,-diphosphate into inositol-1,4,5,-triphosphate (IP3) and 1,2-diacylglycerol (DAG). IP3 is important for the release of Ca ²⁺ from the intracellular reserves and DAG is involved in the activation of protein kinase C. There are ten different isoforms of PLC: PLCβ1-4, PLCγ1 and 2, PLCδ1-4 of which PLCγ1 is important for the tyrosine kinase dependent signaling through EGFR, PDGFR and TCR/CD3. It is ubiquitously expressed, while PLCγ2 is predominantly found in B lymphocytes. PLCγ1 has two SH2 domains and one SH3 domain. It binds to the auto tyrosine phosphorylated receptor through its SH2 domain and gets activated by tyrosine phosphorylation. PLCγ1 is essential for the normal embryonic growth.
Host:	Rabbit
Immunogen:	A synthetic peptide derived from the C-terminus of Bovine PLCgamma1 protein. Remarks: Mol. Wt. of Antigen: 148 kDa
Format:	State: Liquid IgG Purification: Protein A chromatography Buffer System: 10 mM PBS, pH 7.4, with 0.2 % BSA & 0.09 % sodium azide.
Applications:	Immunoprecipitation (Denatured verified): Use Protein A; Ab 10 µg/mg protein lysate. Western Blotting: Ab 5-10 µg/ml for 2 hrs at RT. Recommended positive control: Jurkat and A431 Cells. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody detects Phospholipase Cy1. Cellular Localization: Cytoplasmic Species: Human, Rat, Cow. Other species not tested.
Storage:	Store the antibody at 2 - 8 °C up to one month or in aliquots at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Carpenter G, Qs Ji. (1999) Exp. Cell. Res. 253: 15-24. 2. Kim M j, Kim e, ryu S H, Suh P G. (2000) 32:101-109.