



PLC γ 1 (phospho Tyr783) Polyclonal Antibody

Catalog No	YP-Ab-02391
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	PLCG1
Immunogen	The antiserum was produced against synthesized peptide derived from human PLCG1 around the phosphorylation site of Tyr783. AA range:751-800
Specificity	Phospho-PLC γ 1 (Y783) Polyclonal Antibody detects endogenous levels of PLC 1 protein only when phosphorylated at Y783.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	Phospholipase C-gamma-1;Phospholipase C II;Phospholipase C gamma 1; Phosphoinositide phospholipase C-gamma-1;EC:3.1.4.11;PLCG1;1-phosphatidylinositol 4;5-bisphosphate phosphodiesterase gamma-1;PLC1;PLC-148;Phospholipase C-II;PLC-II;PLC-gamma-1
Observed Band	150kD
Calculated Molecular Weight	150kD
Cell Pathway	Cell projection, lamellipodium . Cell projection, ruffle . Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment. .
Tissue Specificity	Brain,Epithelium,Testis,Vein,
Function	catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Calcium.,domain:The SH3 domain mediates interaction with CLNK (By similarity). The SH3 domain also mediates interaction with RALGPS1.,function:PLC-gamma is a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase.,PTM:The receptor-mediated activation of PLC-gamma-1 and PLC-gamma-2 involves their phosphorylation by tyrosine kinases in



response to ligation of a variety of growth factor receptors and immune system receptors.,PTM:Ubiquitinated by CBLB in activated T-cells.,similarity:Contains 1 C2 domain.,similarity:Contains 1 EF-hand domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 PI-PLC X-box domain.,similarity:Contains 1 PI-PLC Y-box domain.,similarity:Contains 1 SH3 domain.,simil

Background

The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

matters needing attention

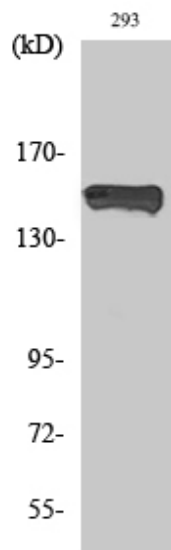
Avoid repeated freezing and thawing!

Usage suggestions

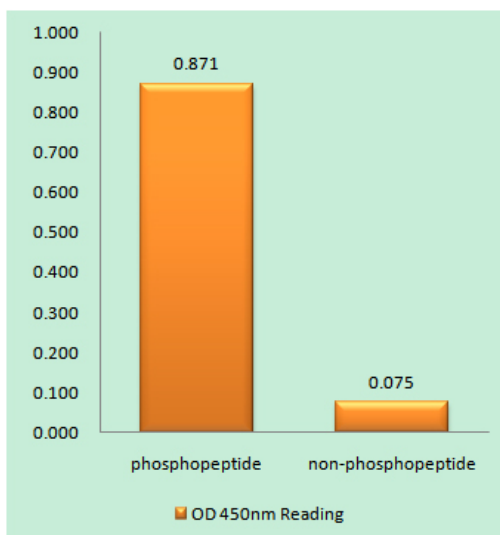
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



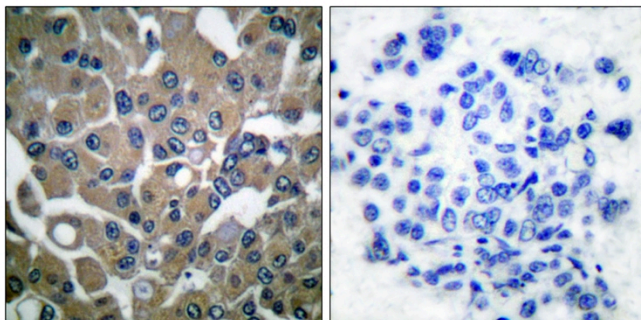
Products Images



Western Blot analysis of various cells using Phospho-PLC γ 1 (Y783) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PLCG1 (Phospho-Tyr783) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PLCG1 (Phospho-Tyr783) Antibody. The picture on the right is blocked with the phospho peptide.

PLCG1 --
(pTyr783)

-- 170

-- 130

-- 95

-- 72

-- 55
(kD)

Western blot analysis of lysates from COS7 cells treated with EGF 200ng/ml 30', using PLCG1 (Phospho-Tyr783) Antibody. The lane on the right is blocked with the phospho peptide.