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Product datasheet for AP06287PU-M

Phospholipase C gamma 1 (PLCG1) Rabbit Polyclonal Antibody

Product data:

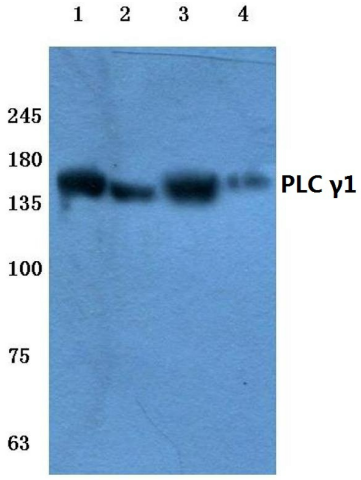
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	**Western blot**: 1/500-1/1000. **Immunohistochemistry on Paraffin Sections:** 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 740-790 of Human PLC γ1.
Specificity:	This antibody detects endogenous levels of PLCG1 protein. (region surrounding Gly777)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 155 kDa
Gene Name:	phospholipase C gamma 1
Database Link:	Entrez Gene 5335 Human P19174

View online »

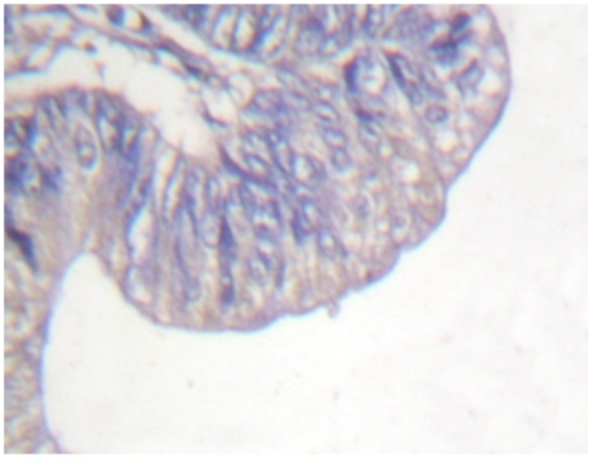
Background: Phosphoinositide-specific phospholipase C (PLC) plays a crucial role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1,4,5-triphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. There are many mammalian PLC isozymes, including PLC β1, PLC β2, PLC β3, PLC β4, PLC γ1, PLC γ2, PLC δ1, PLC δ2 and PLC ε. PLC γ1 is widely distributed in bronchiolar epithelium, type I and II pneumocytes and fibroblasts of the interstitial tissue. Actinregulatory protein Villin is tyrosine phosphorylated and associates with PLC γ1 in the brush border of intestinal epithelial cells. Villin regulates PLC γ1 activity by modifying its own ability to bind phosphatidylinositol 4,5-biphosphate. PLC γ1 binds α1β1 Integrin and modulates α1β1 Integrin-specific adhesion. PLC γ1 and Ca2+ play a direct role in VEGF-regulated endothelial growth, however this signaling pathway is not linked to FGF-mediated effects in primary endothelial cells. PLC γ1 is rapidly activated in response to growth factor stimulation and plays an important role in regulating cell proliferation and differentiation, and may have a protective function during cellular response to oxidative stress.

Synonyms: PLC1, Phospholipase C-gamma-1, PLC-gamma-1, PLC gamma1 Phospholipase C-II, PLC-II, PLC-148

Product images:



Western blot (WB) analysis of PLC ?1 antibody at 1/500 dilution Lane 1:Hela whole cell lysate Lane 2:sp2/0 whole cell lysate Lane 3:PC12 whole cell lysate Lane 4:HEK293T whole cell lysate



Immunohistochemistry (IHC) analyzes of PLCG1 antibody in paraffin-embedded human breast carcinoma tissue.