Best Tools for immunology Research

PLCD3 rabbit pAb

Catalog No :	YT6631
Reactivity :	Human;Mouse
Applications :	WB;IHC
Target :	PLCD3
Fields :	>>Inositol phosphate metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>Phosphatidylinositol signaling system;>>Thyroid hormone signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Shigellosis
Gene Name :	PLCD3 KIAA1964
Protein Name :	PLCD3
Human Gene Id :	113026
Human Swiss Prot No :	Q8N3E9
Mouse Gene Id :	72469
Mouse Swiss Prot No :	Q8K2J0
Immunogen :	Synthesized peptide derived from human PLCD3 AA range: 501-551
Specificity :	This antibody detects endogenous levels of PLCD3 at Human/Mouse
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 87kD

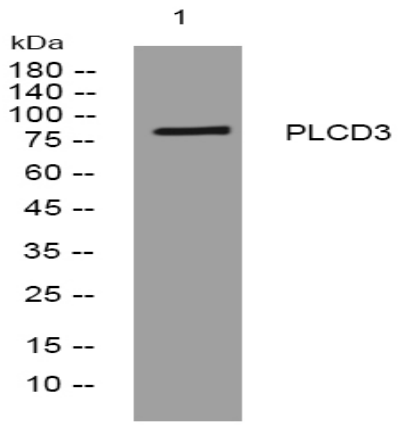
Background : This gene encodes a member of the phospholipase C family, which catalyze the hydrolysis of phosphatidylinositol 4,5-bisphosphate to generate the second messengers diacylglycerol and inositol 1,4,5-trisphosphate (IP3). Diacylglycerol and IP3 mediate a variety of cellular responses to extracellular stimuli by inducing protein kinase C and increasing cytosolic Ca(2+) concentrations. This enzyme localizes to the plasma membrane and requires calcium for activation. Its activity is inhibited by spermine, sphingosine, and several phospholipids. [provided by RefSeq, Jul 2008],

Function : catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Binds 3 calcium ions per subunit. Two of the calcium ions are bound to the C2 domain.,domain:The C2 domain is a Ca(2+)-dependent membrane-targeting module.,domain:The PH domain mediates interaction with the surface membrane by binding to PIP2.,enzyme regulation:Strongly activated by phosphatidic acid. Inhibited by phosphatidylethanolamine (PtdEtn), phosphatidylcholine (PtdCho), sphingomyelin and phosphatidylserine (PtdSer).,function:Hydrolyzes the phosphatidylinositol 4,5-bisphosphate (PIP2) to generate 2 second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). DAG mediates the activation of protein kinase C (PKC), while IP3 releases Ca(2+) from intracellular stores. Essential for trophoblast and placental development.

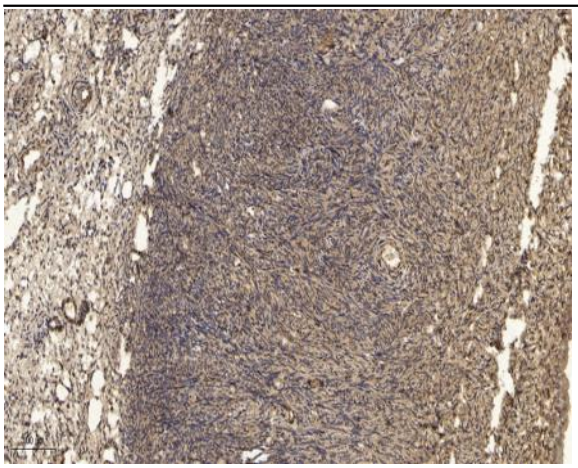
Subcellular Location : Membrane; Peripheral membrane protein. Cytoplasm. Cleavage furrow . Localizes at the cleavage furrow during cytokinesis. .

Expression : Present in corneal epithelial cells (at protein level).

Products Images



Western blot analysis of lysates from MCF-7 cells, primary antibody was diluted at 1:1000, 4°over night



Immunohistochemical analysis of paraffin-embedded human oophoroma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).