



# PLCD3 rabbit pAb

<b>Catalog No</b>	YP-Ab-11266
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human; Mouse
<b>Applications</b>	WB;IHC
<b>Gene Name</b>	PLCD3 KIAA1964
<b>Protein Name</b>	PLCD3
<b>Immunogen</b>	Synthesized peptide derived from human PLCD3 AA range: 501-551
<b>Specificity</b>	This antibody detects endogenous levels of PLCD3 at Human/Mouse
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB 1:500-2000;IHC-p 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	
<b>Cell Pathway</b>	Membrane; Peripheral membrane protein. Cytoplasm. Cleavage furrow . Localizes at the cleavage furrow during cytokinesis. .
<b>Tissue Specificity</b>	Present in corneal epithelial cells (at protein level).
<b>Function</b>	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.
<b>Background</b>	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],

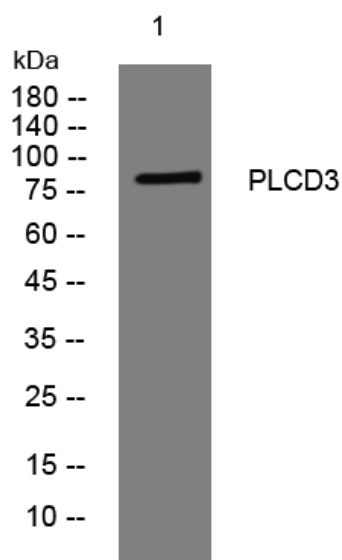
**matters needing attention**

Avoid repeated freezing and thawing!

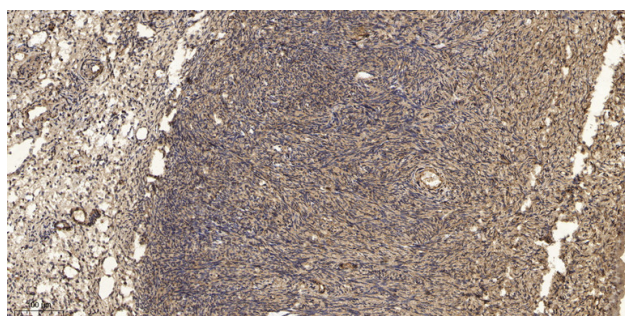
**Usage suggestions**

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

## Products Images



Western blot analysis of 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).