



# PLCD4 rabbit pAb

<b>Catalog No</b>	YP-Ab-08184
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human; Mouse; Rat
<b>Applications</b>	WB
<b>Gene Name</b>	PLCD4
<b>Protein Name</b>	PLCD4
<b>Immunogen</b>	Synthesized peptide derived from human PLCD4 AA range: 82-132
<b>Specificity</b>	This antibody detects endogenous levels of PLCD4 at Human/Mouse/Rat
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.299% 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
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase delta-4 (hPLCD4) (EC 3.1.4.11) (Phosphoinositide phospholipase C-delta-4) (Phospholipase C-delta-4) (PLC-delta-4)
<b>Observed Band</b>	85kD
<b>Cell Pathway</b>	Membrane ; Peripheral membrane protein . Nucleus . Cytoplasm . Endoplasmic reticulum . Localizes primarily to intracellular membranes mostly to the endoplasmic reticulum.
<b>Tissue Specificity</b>	Highly expressed in skeletal muscle and kidney tissues, and at moderate level in intestinal tissue. Expressed in corneal epithelial cells.
<b>Function</b>	catalytic activity: 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H <sub>2</sub> 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 mediates pre-localization to the membrane prior to Ca <sup>2+</sup> import and non-selective Ca <sup>2+</sup> -mediated targeting to various cellular membranes., domain: The PDZ-binding motif mediates the interaction with GRIP1., domain: The PH domain is not a critical determinant of the membrane localization., function: Hydrolyzes the phosphatidylinositol 4,5-bisphosphate (PIP <sub>2</sub> ) to generate 2 second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP <sub>3</sub> ). DAG mediates the activation of protein kinase C (PKC), while IP <sub>3</sub> releases Ca <sup>2+</sup> from intracellular stores. Required for acrosome reaction in sperm during fertilization, probably by acting as an



## Background

This gene encodes a member of the delta class of phospholipase C enzymes. Phospholipase C enzymes play a critical role in many cellular processes by hydrolyzing phosphatidylinositol 4,5-bisphosphate into two intracellular second messengers, inositol 1,4,5-trisphosphate and diacylglycerol. Expression of this gene may be a marker for cancer. [provided by RefSeq, Jan 2011],

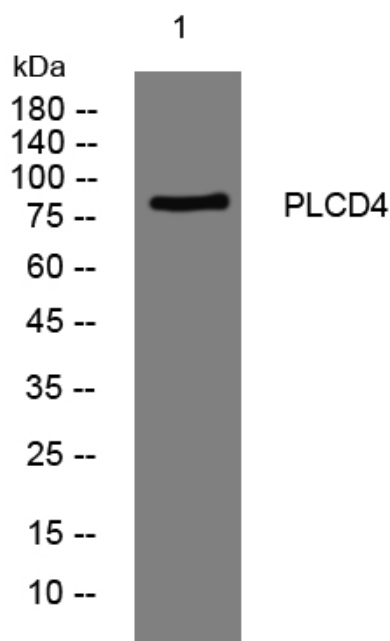
## matters needing attention

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 HEK293 cells, primary antibody was diluted at 1:1000, 4° over night