

PLCZ1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9423a

Product Information

Application	WB, E
Primary Accession	Q86YW0
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24781
Calculated MW	70411
Antigen Region	26-54

Additional Information

Gene ID	89869
Other Names	1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase zeta-1, Phosphoinositide phospholipase C-zeta-1, Phospholipase C-zeta-1, PLC-zeta-1, Testis-development protein NYD-SP27, PLCZ1 (HGNC:19218)
Target/Specificity	This PLCZ1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-54 amino acids from the N-terminal region of human PLCZ1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PLCZ1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLCZ1 (HGNC:19218)
Function	The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. In vitro, hydrolyzes

PtdIns(4,5)P2 in a Ca(2+)-dependent manner. Triggers intracellular Ca(2+) oscillations in oocytes solely during M phase and is involved in inducing oocyte activation and initiating embryonic development up to the blastocyst stage. Is therefore a strong candidate for the egg-activating soluble sperm factor that is transferred from the sperm into the egg cytoplasm following gamete membrane fusion. May exert an inhibitory effect on phospholipase-C-coupled processes that depend on calcium ions and protein kinase C, including CFTR trafficking and function.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q8K4D7}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q8K4D7} Note=Exhibits alternative cytoplasmic/nuclear localization during development. Translocates from the pronucleus into cytoplasm upon nuclear envelope breakdown for mitosis and localizes again to the pronucleus at interphase following meiosis and mitosis (By similarity) {ECO:0000250|UniProtKB:Q8K4D7}

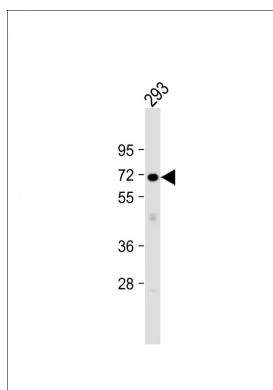
Tissue Location

Expressed specifically in testis and sperm. Weakly expressed in pancreatic-duct cells. Up-regulated in pancreatic-duct cells from patients with cystic fibrosis.

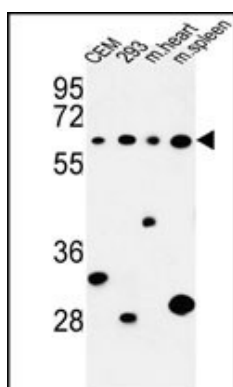
References

Yoon, S.Y., et al. J. Clin. Invest. 118(11):3671-3681(2008)
 Ito, M., et al. Biol. Reprod. 78(6):1081-1090(2008)
 Yu, Y., et al. Hum. Reprod. 23(2):365-373(2008)
 Yoshida, N., et al. Development 134(21):3941-3952(2007)
 Zhu, J.X., et al. Cell Biol. Int. 31(5):521-525(2007)

Images



Anti-PLCZ1 Antibody (N-term) at 1:1000 dilution + 293 whole cell lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 70 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of PLCZ1 Antibody (N-term) (Cat. #AP9423a) in CEM, 293 cell line and mouse heart, spleen tissue lysates (35ug/lane). PLCZ1 (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.