

PLCZ1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9423a

Specification

PLCZ1 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q86YW0

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 70411
Antigen Region 26-54

PLCZ1 Antibody (N-term) - 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 (nyb-sp27, PLCZ1

href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=19218" target=" blank">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

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.

PLCZ1 Antibody (N-term) - 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

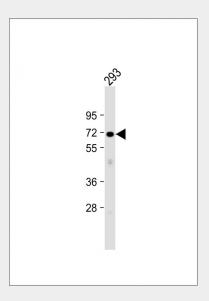
Expressed specifically in testis and sperm. Weakly expressed in pancreatic-duct cells. Up-regulated in pancreatic-duct cells from patients with cystic fibrosis.

PLCZ1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

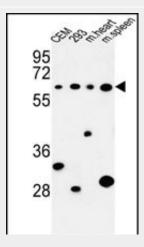
PLCZ1 Antibody (N-term) - Images



Anti-PLCZ1 Antibody (N-term) at 1:1000 dilution + 293 whole cell lysate 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.

PLCZ1 Antibody (N-term) - 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)