

**PLCZ1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9423a****Specification**

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**PLCZ1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q86YW0](#)**PLCZ1 Antibody (N-term) Blocking Peptide - 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 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=19218](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=19218))  
HGNC:19218

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PLCZ1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PLCZ1 Antibody (N-term) Blocking Peptide - Images****PLCZ1 Antibody (N-term) Blocking Peptide - 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)