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PLD1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6377a

Specification

PLD1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q13393

PLD1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5337

Other Names
Phospholipase D1, PLD 1, hPLD1, Choline phosphatase 1, Phosphatidylcholine-hydrolyzing phospholipase D1, PLD1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6377a was selected from the N-term region of human PLD1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

PLD1 Antibody (N-term) Blocking Peptide - Protein Information

Name PLD1 (HGNC:9067)

PLD1 Antibody (N-term) Blocking Peptide - Background

Phosphatidylcholine (PC)-specific phospholipases D (PLDs; EC 3.1.4.4) catalyze the hydrolysis of PC to produce phosphatidic acid and choline. A range of agonists acting through G protein-coupled receptors and receptor tyrosine kinases stimulate this hydrolysis. PC-specific PLD activity has been implicated in numerous cellular pathways, including signal transduction, membrane trafficking, and the regulation of mitosis (Hammond et al., 1995 [PubMed 8530346]).[supplied by OMIM]

PLD1 Antibody (N-term) Blocking Peptide - References

Sun,Y., Proc. Natl. Acad. Sci. U.S.A. 105 (24), 8286-8291 (2008)Sethu,S., J. Immunol. 180 (9), 6027-6034 (2008)Nagasaki,A., Cell Struct. Funct. 33 (1), 27-33 (2008)

Function
Function as phospholipase selective for phosphatidylcholine (PubMed:8530346, PubMed:9582313). Implicated as a critical step in numerous cellular pathways, including signal transduction, membrane trafficking, and the regulation of mitosis. May be involved in the regulation of perinuclear intravesicular membrane traffic (By similarity).

Cellular Location
Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q9Z280}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}. Late endosome membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}

Tissue Location
Expressed abundantly in the pancreas and heart and at high levels in brain, placenta, spleen, uterus and small intestine

PLD1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides