

PLD1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12199a**Specification**

PLD1 Antibody (N-term) Blocking peptide - Product InformationPrimary 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

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](#))**Function**

Function as phospholipase selective for phosphatidylcholine (PubMed:8530346, PubMed:9582313, PubMed:25936805). 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](#)

PLD1 Antibody (N-term) Blocking peptide - Images**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]).

PLD1 Antibody (N-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Kang, D.W., et al. Cancer Res. 70(10):4233-4242(2010) Yin, H., et al. J. Biol. Chem. 285(18):13580-13588(2010) Kang, D.W., et al. PLoS ONE 5 (8), E12109 (2010) :