

PLD3 Blocking Peptide(N-term)
Synthetic peptide
Catalog # BP19786a**Specification**

PLD3 Blocking Peptide(N-term) - Product Information

Primary Accession [Q8IV08](#)
Other Accession [Q5FVH2](#), [Q35405](#), [Q4R583](#), [Q2KJJ8](#),
[NP_036400.2](#)

PLD3 Blocking Peptide(N-term) - Additional Information

Gene ID 23646

Other Names

Phospholipase D3, PLD 3, Choline phosphatase 3, HindIII K4L homolog, Hu-K4,
Phosphatidylcholine-hydrolyzing phospholipase D3, PLD3

Target/Specificity

The synthetic peptide sequence is selected from aa 24-37 of HUMAN PLD3

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.

PLD3 Blocking Peptide(N-term) - Protein Information

Name PLD3

Function

5'→3' DNA exonuclease which digests single-stranded DNA (ssDNA) (PubMed:30312375). Regulates inflammatory cytokine responses via the degradation of nucleic acids, by reducing the concentration of ssDNA able to stimulate TLR9, a nucleotide-sensing receptor in collaboration with PLD4 (By similarity). May be important in myotube formation (PubMed:22428023). Plays a role in lysosomal homeostasis (PubMed:28128235). Involved in the regulation of endosomal protein sorting (PubMed:29368044).

Cellular Location

Endoplasmic reticulum membrane; Single-pass type II membrane protein. Lysosome lumen. Early

endosome membrane; Single-pass type II membrane protein. Late endosome membrane; Single-pass type II membrane protein. Golgi apparatus membrane; Single-pass type II membrane protein. Endosome membrane; Single-pass type II membrane protein. Note=Localizes to ER-associated vesicles in differentiating myotubes (PubMed:22428023). The soluble form in lysosome arises by proteolytic processing of the membrane-bound form (PubMed:29386126). Colocalizes with APP in endosomes (PubMed:29368044)

Tissue Location

Widely expressed. In the brain, high levels of expression are detected in the frontal, temporal and occipital cortices and hippocampus. Expressed at low level in corpus callosum

PLD3 Blocking Peptide(N-term) - Protocols

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

- [Blocking Peptides](#)

PLD3 Blocking Peptide(N-term) - Images**PLD3 Blocking Peptide(N-term) - Background**

The function of this protein is unknown.

PLD3 Blocking Peptide(N-term) - References

Idkowiak-Baldys, J., et al. J. Biol. Chem. 284(33):22322-22331(2009)
Walker, L.C., et al. Breast Cancer Res. Treat. 112(2):229-236(2008)
Russo, P., et al. Am. J. Hypertens. 19(4):331-338(2006)
Cheng, J., et al. Science 308(5725):1149-1154(2005)
Munck, A., et al. FEBS J. 272(7):1718-1726(2005)