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DDHD1 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP5427b

Specification

DDHD1 Blocking Peptide (C-term) - Product Information

Primary Accession	Q8NEL9
Other Accession	NP_085140.2, NP_001153620.1, NP_001153619.1

DDHD1 Blocking Peptide (C-term) - Additional Information

Gene ID 80821

Other Names
Phospholipase DDHD1, 311-, DDHD domain-containing protein 1, Phosphatidic acid-preferring phospholipase A1 homolog, PA-PLA1, DDHD1, KIAA1705

Target/Specificity
The synthetic peptide sequence is selected from aa 841-854 of HUMAN DDHD1

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.

DDHD1 Blocking Peptide (C-term) - Protein Information

Name DDHD1 (HGNC:19714)

Synonyms KIAA1705

Function
Phospholipase A1 (PLA1) that hydrolyzes ester bonds at the sn-1 position of glycerophospholipids producing a free fatty acid and a lysophospholipid (Probable) (PubMed:20359546, PubMed:22922100). Prefers phosphatidate (1,2-diacyl-sn-glycero-3-phosphate, PA) as substrate in vitro, but can efficiently hydrolyze phosphatidylinositol (1,2-diacyl- sn-glycero-3-phospho-(1D-myo-inositol), PI), as well as a range of other glycerophospholipid substrates such as phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine, PC), phosphatidylethanolamine (1,2-diacyl-sn-glycero-3-phosphoethanolamine, PE), phosphatidylserine (1,2-diacyl-sn-glycero-3-phospho-L-serine, PS) and phosphatidylglycerol

(1,2-diacyl-sn-glycero-3-phospho-(1'-sn-glycerol), PG) (Probable) (PubMed:20359546). Involved in the regulation of the endogenous content of polyunsaturated PI and PS lipids in the nervous system. Changes in these lipids extend to downstream metabolic products like PI phosphates PIP and PIP2, which play fundamental roles in cell biology (By similarity). Regulates mitochondrial morphology (PubMed:24599962). These dynamic changes may be due to PA hydrolysis at the mitochondrial surface (PubMed:24599962). May play a regulatory role in spermatogenesis or sperm function (PubMed:24599962).

Cellular Location
Cytoplasm.

Tissue Location
Highly expressed in testis. Also expressed in brain, spleen and lung. Only expressed in cerebellum in fetal brain

DDHD1 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

DDHD1 Blocking Peptide (C-term) - Images

DDHD1 Blocking Peptide (C-term) - References

Simon-Sanchez, J., et al. Nat. Genet. 41(12):1308-1312(2009)
Houlston, R.S., et al. Nat. Genet. 40(12):1426-1435(2008)
Ma, J., et al. Atherosclerosis 191(1):63-72(2007)
Choy, K.W., et al. Physiol. Genomics 25(1):9-15(2006)
Higgs, H.N., et al. J. Biol. Chem. 273(10):5468-5477(1998)