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ACER3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8953b

Specification

ACER3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NUN7

ACER3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 55331

Other Names
Alkaline ceramidase 3, AlkCDase 3, Alkaline CDase 3, 351-, Alkaline dihydroceramidase SB89, Alkaline phytoceramidase, aPHC, ACER3, APHC, PHCA

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8953b was selected from the C-term region of human ACER3. 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.

ACER3 Antibody (C-term) Blocking Peptide - Protein Information

Name ACER3

Synonyms APHC, PHCA

Function
Endoplasmic reticulum and Golgi ceramidase that catalyzes the hydrolysis of unsaturated long-chain C18:1-, C20:1- and C20:4- ceramides, dihydroceramides and phytoceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:20068046, PubMed:26792856, PubMed:20207939, PubMed:11356846, PubMed:30575723). Ceramides, sphingosine, and its phosphorylated form sphingosine-1- phosphate are bioactive lipids that

mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:20068046). Controls the generation of sphingosine in erythrocytes, and thereby sphingosine-1- phosphate in plasma (PubMed:20207939). Through the regulation of ceramides and sphingosine-1-phosphate homeostasis in the brain may play a role in neurons survival and function (By similarity). By regulating the levels of pro-inflammatory ceramides in immune cells and tissues, may modulate the inflammatory response (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein

Tissue Location
Ubiquitously expressed. Highly expressed in placenta (PubMed:11356846). Expressed in erythrocytes (PubMed:20207939).

ACER3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ACER3 Antibody (C-term) Blocking Peptide - Images

ACER3 Antibody (C-term) Blocking Peptide - Background

ACER3 hydrolyzes only phytoceramide into phytosphingosine and free fatty acid. Does not have reverse activity.

ACER3 Antibody (C-term) Blocking Peptide - References

Wheeler,H.E., et.al., PLoS Genet. 5 (10), E1000685 (2009)Mao,C. et.al., Biochim. Biophys. Acta 1781 (9), 424-434 (2008)