

FA2H Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP4799c

Specification

FA2H Antibody (Center) Blocking Peptide -Product Information

Primary Accession <u>Q7L5A8</u>

FA2H Antibody (Center) Blocking Peptide -Additional Information

Gene ID 79152

Other Names Fatty acid 2-hydroxylase, 1---, Fatty acid alpha-hydroxylase, FA2H, FAAH

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.

FA2H Antibody (Center) Blocking Peptide -Protein Information

Name FA2H

Function

Catalyzes the hydroxylation of free fatty acids at the C-2 position to produce 2-hydroxy fatty acids, which are building blocks of sphingolipids and glycosphingolipids common in neural tissue and epidermis (PubMed:15337768" target="_blank">15337768" target="_blank">15337768() target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()target="_blank">15337768()

FA2H Antibody (Center) Blocking Peptide -Background

FA2H is a protein that catalyzes the synthesis of 2-hydroxysphingolipids, a subset of sphingolipids that contain 2-hydroxy fatty acids. Sphingolipids play roles in many cellular processes and their structural diversity arises from modification of the hydrophobic ceramide moiety, such as by 2-hydroxylation of the N-acyl chain, and the existence of many different head groups.

FA2H Antibody (Center) Blocking Peptide -References

Wheeler, H.E., et al. PLoS Genet. 5 (10), E1000685 (2009) Edvardson, S., et al. Am. J. Hum. Genet. 83(5):643-648(2008)Uchida, Y., et al. J. Biol. Chem. 282(18):13211-13219(2007)



target=" blank">15863841, PubMed:17355976, PubMed:22517924). FA2H is stereospecific for the production of (R)-2hydroxy fatty acids (PubMed:22517924). Plays an essential role in the synthesis of galactosphingolipids of the myelin sheath (By similarity). Responsible for the synthesis of sphingolipids and glycosphingolipids involved in the formation of epidermal lamellar bodies critical for skin permeability barrier (PubMed:17355976). Participates in the synthesis of glycosphingolipids and a fraction of type II wax diesters in sebaceous gland, specifically regulating hair follicle homeostasis (By similarity). Involved in the synthesis of sphingolipids of plasma membrane rafts, controlling lipid raft mobility and trafficking of raft-associated proteins (By similarity).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q5MPP0}; Multi-pass membrane protein. Microsome membrane; Multi-pass membrane protein

Tissue Location

Detected in differentiating cultured keratinocytes (at protein level). Detected in epidermis and cultured keratinocytes (PubMed:17355976). Highly expressed in brain and colon. Detected at lower levels in testis, prostate, pancreas and kidney (PubMed:15337768).

FA2H Antibody (Center) Blocking Peptide -Protocols

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

Blocking Peptides