

FA2H Polyclonal Antibody

Catalog # AP74261

Specification

FA2H Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB <u>07L5A8</u> Human, Mouse, Rat Rabbit Polyclonal

FA2H Polyclonal Antibody - Additional Information

Gene ID 79152

Other Names Fatty acid 2-hydroxylase (EC 1.-.-.) (Fatty acid alpha-hydroxylase)

Dilution WB~~WB 1:500-2000, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

FA2H Polyclonal Antibody - 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:http://www.uniprot.org/citations/15337768

target="_blank">15337768, PubMed:15863841, PubMed:17355976, PubMed:22517924). FA2H is stereospecific for the production of (R)-2- hydroxy fatty acids (PubMed:<a href="http://www.uniprot.org/citations/22517924"

target="_blank">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 Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FA2H Polyclonal Antibody - Images







FA2H Polyclonal Antibody - Background

Catalyzes stereospecific hydroxylation of free fatty acids at the C-2 position to produce (R)-2-hydroxy fatty acids, which are building blocks of sphingolipids and glycosphingolipids common in neural tissue and epidermis (PubMed:17355976, PubMed:22517924, PubMed:15863841, PubMed:15337768). 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).