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FA2H Polyclonal Antibody

Catalog # AP74261

Product Information

Application	WB, E
Primary Accession	Q7L5A8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42791

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 E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

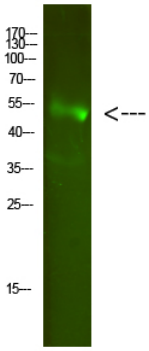
Name	FA2H
Function	Catalyzes the hydroxylation of free fatty acids at the C-2 position to produce 2-hydroxy fatty acids, which are building blocks of sphingolipids and glycosphingolipids common in neural tissue and epidermis (PubMed:15337768, PubMed:15863841, PubMed:17355976, PubMed:22517924). FA2H is stereospecific for the production of (R)-2-hydroxy 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).

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).

Images



Western Blot analysis of mouse-heart cells using primary antibody diluted at 1:2000(4°C overnight). Secondary antibody：Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.