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FA2H Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP4799c

Specification

FA2H Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q7L5A8
Other Accession	Q2LAM0, Q5MPP0, Q4R4P4
Reactivity	**Human, Mouse**
Predicted	**Monkey, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42791**
Antigen Region	**121-148**

FA2H Antibody (Center) - Additional Information

Gene ID 79152

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

Target/Specificity
This FA2H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 121-148 amino acids from the Central region of human FA2H.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
FA2H Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

FA2H Antibody (Center) - 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

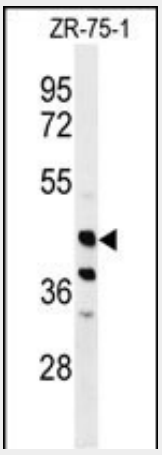
Tissue Location
Detected in differentiating cultured keratinocytes (at protein level). Detected in epidermis and cultured keratinocytes (PubMed:17355976). Highly expressed in brain and colon. Detected at lower levels in testis, prostate, pancreas and kidney (PubMed:15337768).

FA2H Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FA2H Antibody (Center) - Images



Western blot analysis of FA2H Antibody (Center) (Cat. #AP4799c) in ZR-75-1 cell line lysates (35ug/lane). FA2H (arrow) was detected using the purified Pab.

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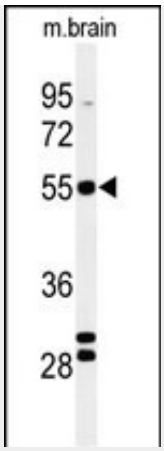
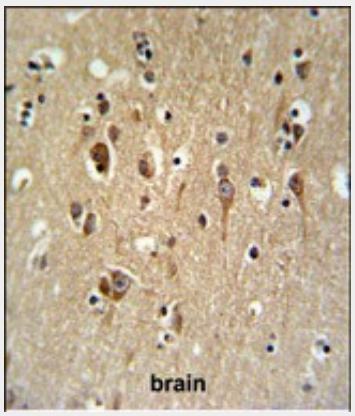


Western blot analysis of FA2H Antibody (Center) (Cat. #AP4799c) in mouse brain tissue lysates (35ug/lane). FA2H (arrow) was detected using the purified Pab.



FA2H Antibody (Center) (Cat. #AP4799c) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FA2H Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

FA2H Antibody (Center) - 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) - 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)