

ELOVL4 Polyclonal Antibody

Catalog # AP69721

Product Information

Application	WB
Primary Accession	Q9GZR5
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36829

Additional Information

Gene ID	6785
Other Names	ELOVL4; Elongation of very long chain fatty acids protein 4; 3-keto acyl-CoA synthase ELOVL4; ELOVL fatty acid elongase 4; ELOVL FA elongase 4
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	ELOVL4 {ECO:0000255 HAMAP-Rule:MF_03204}
Function	Catalyzes the first and rate-limiting reaction of the four reactions that constitute the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process allows the addition of 2 carbons to the chain of long- and very long-chain fatty acids (VLCFAs) per cycle. Condensing enzyme that catalyzes the synthesis of very long chain saturated (VLC-SFA) and polyunsaturated (PUFA) fatty acids that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May play a critical role in early brain and skin development.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000255 HAMAP-Rule:MF_03204, ECO:0000269 PubMed:16036915, ECO:0000269 PubMed:20937905}; Multi-pass membrane protein {ECO:0000255 HAMAP-Rule:MF_03204}
Tissue Location	Expressed in the retina and at much lower level in the brain. Ubiquitous, highest expression in thymus, followed by testis, small intestine, ovary, and prostate. Little or no expression in heart, lung, liver, or leukocytes.

Background

Catalyzes the first and rate-limiting reaction of the four reactions that constitute the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process allows the addition of 2 carbons to the chain of long- and very long-chain fatty acids (VLCFAs) per cycle. Condensing enzyme that specifically elongates C24:0 and C26:0 acyl-CoAs. May participate in the production of saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May play a critical role in early brain and skin development.

Images



Western Blot analysis of various cells using ELOVL4
Polyclonal Antibody diluted at 1 : 1000

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