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ELOVL5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12826b

Product Information

Application	WB, E
Primary Accession	Q9NYP7
Other Accession	Q4R516, NP_068586.1
Reactivity	Human
Predicted	Monkey, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32502
Calculated MW	35293
Antigen Region	240-269

Additional Information

Gene ID	60481
Other Names	Elongation of very long chain fatty acids protein 5, 3-keto acyl-CoA synthase ELOVL5, ELOVL fatty acid elongase 5, ELOVL FA elongase 5, Fatty acid elongase 1, hELO1, Very-long-chain 3-oxoacyl-CoA synthase 5, ELOVL5, ELOVL2
Target/Specificity	This ELOVL5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 240-269 amino acids from the C-terminal region of human ELOVL5.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	ELOVL5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ELOVL5 {ECO:0000255|HAMAP-Rule:MF_03205}
Synonyms	ELOVL2

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 acts specifically toward polyunsaturated acyl-CoA with the higher activity toward C18:3(n-6) acyl-CoA. May participate in the production of monounsaturated and of polyunsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators (By similarity) (PubMed:10970790, PubMed:20937905). In conditions where the essential linoleic and alpha linoleic fatty acids are lacking it is also involved in the synthesis of Mead acid from oleic acid (By similarity).
Cellular Location	Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:20937905}; Multi- pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03205}. Cell projection, dendrite {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:25065913}. Note=In Purkinje cells, the protein localizes to the soma and proximal portion of the dendritic tree {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:25065913}
Tissue Location	Ubiquitous. Highly expressed in the adrenal gland and testis. Weakly expressed in prostate, lung and brain. Expressed in the cerebellum.

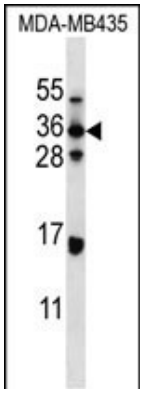
Background

ELOVL5 plays a role in elongation of long-chain polyunsaturated fatty acids (Leonard et al., 2000 [PubMed 10970790]).

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Meguro, A., et al. Ophthalmology 117(7):1331-1338(2010)
Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)

Images



ELOVL5 Antibody (C-term) (Cat. #AP12826b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the ELOVL5 antibody detected the ELOVL5 protein (arrow).

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