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ELOVL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9191a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9NXB9
Other Accession	Q9JLJ4
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23770
Calculated MW	34585
Antigen Region	1-27

Additional Information

Gene ID	54898
Other Names	Elongation of very long chain fatty acids protein 2, 3-keto acyl-CoA synthase ELOVL2, ELOVL fatty acid elongase 2, ELOVL FA elongase 2, Very-long-chain 3-oxoacyl-CoA synthase 2, ELOVL2, SSC2
Target/Specificity	This ELOVL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-27 amino acids from the N-terminal region of human ELOVL2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	ELOVL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ELOVL2 {ECO:0000255|HAMAP-Rule:MF_03202}

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 polyunsaturated very long chain fatty acid (C20- and C22-PUFA), acting specifically toward polyunsaturated acyl-CoA with the higher activity toward C20:4(n-6) acyl-CoA. May participate in the production of polyunsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03202, ECO:0000269|PubMed:20937905}; Multi- pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03202}
Tissue Location	Liver and testis..

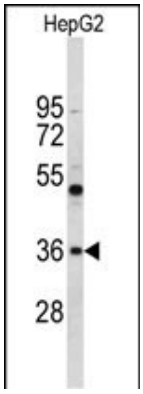
Background

ELOVL2 could be implicated in tissue-specific synthesis of very long chain fatty acids and sphingolipids. This protein may catalyze one or both of the reduction reaction in fatty acid elongation, i.e., conversion of beta-ketoacyl CoA to beta-hydroxyacyl CoA or reduction of trans-2-enoyl CoA to the saturated acyl CoA derivative (By similarity).

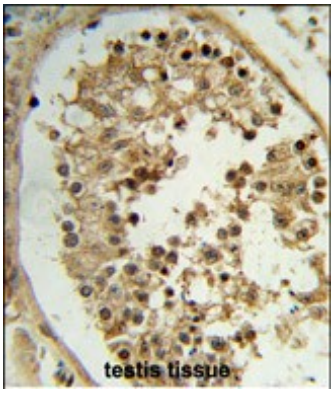
References

Illig,T., et.al., Nat. Genet. 42 (2), 137-141 (2010)
Tanaka,T., et.al., PLoS Genet. 5 (1), E1000338 (2009)

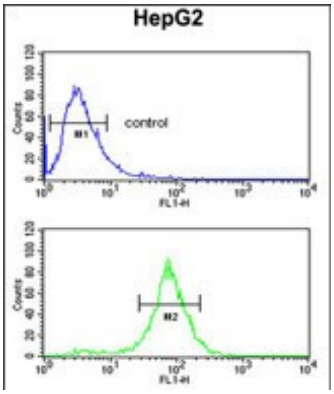
Images



Western blot analysis of ELOVL2 Antibody (N-term) (Cat. #AP9191a) in HepG2 cell line lysates (35ug/lane). ELOVL2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human testis tissue reacted with ELOVL2 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ELOVL2 Antibody (N-term) (Cat. #AP9191a) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Ectopic Myoglobin Expression Is Associated with a Favourable Outcome in Head and Neck Squamous Cell Carcinoma Patients.