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ELOVL1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50613

Product Information

Application	WB
Primary Accession	Q9BW60
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	32663

Additional Information

Gene ID	64834
Other Names	Elongation of very long chain fatty acids protein 1, 3-keto acyl-CoA synthase ELOVL1, ELOVL fatty acid elongase 1, ELOVL FA elongase 1, Very-long-chain 3-oxoacyl-CoA synthase 1, ELOVL1, SSC1
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	ELOVL1 (HGNC:14418)
Synonyms	SSC1
Function	Catalyzes the first and rate-limiting reaction of the four reactions that constitute the long-chain fatty acids elongation cycle (PubMed:29496980, PubMed:30487246). 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 exhibits activity toward saturated and monounsaturated acyl-CoA substrates, with the highest activity towards C22:0 acyl-CoA. May participate in the production of both saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. Important for saturated C24:0 and monounsaturated C24:1 sphingolipid synthesis (PubMed:20937905). Indirectly inhibits RPE65 via production of VLCFAs.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03201,

ECO:0000269|PubMed:20937905, ECO:0000269|PubMed:30487246};
Multi-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03201}

Tissue Location Ubiquitous.

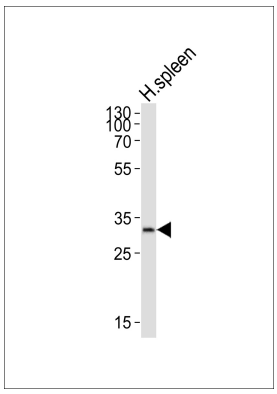
Background

Condensing enzyme that catalyzes the synthesis of both saturated and monounsaturated very long chain fatty acids (VLCFAs). Exhibits activity toward saturated C18 to C26 acyl-CoA substrates, with the highest activity towards C22:0 acyl-CoA. Important for saturated C24:0 and monounsaturated C24:1 sphingolipid synthesis. Indirectly inhibits RPE65 via production of VLCFAs.

References

Asadi A.,et al.Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
Lai C.-H.,et al.Genome Res. 10:703-713(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Jakobsson A.,et al.Prog. Lipid Res. 45:237-249(2006).

Images



Western blot analysis of lysate from human spleen tissue lysate,using ELOVL1 Antibody(AP50613). AP50613 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

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