

ELOVL1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17913a**Specification**

ELOVL1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9BW60](#)**ELOVL1 Antibody (N-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ELOVL1 Antibody (N-term) Blocking Peptide - 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.

ELOVL1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ELOVL1 Antibody (N-term) Blocking Peptide - Images**ELOVL1 Antibody (N-term) Blocking Peptide - Background**

ELOVL1 could be implicated in tissue-specific synthesis of very long chain fatty acids and sphingolipids. 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).

ELOVL1 Antibody (N-term) Blocking Peptide - References

Ohno, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 107(43):18439-18444(2010)Ofman, R., et al. EMBO Mol Med 2(3):90-97(2010)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Lehner, R., et al. Prog. Lipid Res. 35(2):169-201(1996)