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# ELOVL1 Polyclonal Antibody

Catalog # AP69718

## Product Information

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| **Application** | WB, IHC-P |
| **Primary Accession** | Q9BW60 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 32663 |

## Additional Information

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| **Gene ID** | 64834 |
| **Other Names** | ELOVL1; SSC1; CGI-88; Elongation of very long chain fatty acids protein 1; 3-keto acyl-CoA synthase ELOVL1; ELOVL fatty acid elongase 1; ELOVL FA elongase 1 |
| **Dilution** | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~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℃ |

## Protein Information

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| **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. |

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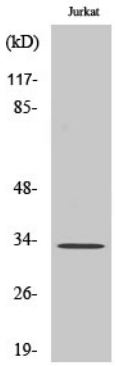
| **Cellular Location** | Endoplasmic reticulum membrane {ECO:0000255\|HAMAP-Rule:MF_03201, ECO:0000269\|PubMed:20937905, ECO:0000269\|PubMed:30487246}; Multi-pass membrane protein {ECO:0000255\|HAMAP-Rule:MF_03201} |
| **Tissue Location** | Ubiquitous. |

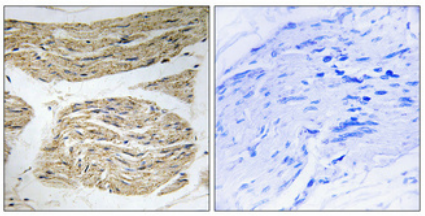
## Background

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 exhibits activity toward saturated C18 to C26 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. Indirectly inhibits RPE65 via production of VLCFAs.

## Images




Western Blot analysis of various cells using ELOVL1 Polyclonal Antibody diluted at 1：1000



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.