

ELOVL6 (H-120): sc-135005

BACKGROUND

Elongation of very long chain fatty acid-like (ELOVL) proteins 1-6 are members of the ELO family of proteins, which play an important role in tissue-specific biosynthesis of very long chain fatty acids and sphingolipids. The ELOVL proteins act as catalysts in fatty acid elongation reduction and localize to the endoplasmic reticulum (ER). ELOVL6 (elongation of very long chain fatty acids protein 6), also known as fatty acid elongase 2, LCE (long-chain fatty-acyl elongase), FACE (fatty acyl-CoA elongase) or FAE, is a 265 amino acid multi-pass membrane protein that localizes to endoplasmic reticulum and mitochondria. A fatty acid elongase with specificity for C12-C16 saturated and monoinsaturated fatty acids, ELOVL6 is implicated in Insulin sensitivity and energy metabolism, and is therefore considered a potential target for metabolic diseases including cardiovascular disease and diabetes.

REFERENCES

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3. Matsuzaka, T., et al. 2002. Cloning and characterization of a mammalian fatty acyl-CoA elongase as a lipogenic enzyme regulated by SREBPs. *J. Lipid Res.* 43: 911-920.
4. Jakobsson, A., et al. 2006. Fatty acid elongases in mammals: their regulation and roles in metabolism. *Prog. Lipid Res.* 45: 237-249.
5. Matsuzaka, T., et al. 2007. Crucial role of a long-chain fatty acid elongase, ELOVL6, in obesity-induced Insulin resistance. *Nat. Med.* 13: 1193-1202.
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7. Lu, Y., et al. 2008. Multiple genetic variants along candidate pathways influence plasma high-density lipoprotein cholesterol concentrations. *J. Lipid Res.* 49: 2582-2589.
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CHROMOSOMAL LOCATION

Genetic locus: ELOVL6 (human) mapping to 4q25; Elovl6 (mouse) mapping to 3 G3.

SOURCE

ELOVL6 (H-120) is a rabbit polyclonal antibody raised against amino acids 1-120 mapping at the N-terminus of ELOVL6 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ELOVL6 (H-120) is recommended for detection of ELOVL6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ELOVL6 (H-120) is also recommended for detection of ELOVL6 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for ELOVL6 siRNA (h): sc-62271, ELOVL6 siRNA (m): sc-62272, ELOVL6 shRNA Plasmid (h): sc-62271-SH, ELOVL6 shRNA Plasmid (m): sc-62272-SH, ELOVL6 shRNA (h) Lentiviral Particles: sc-62271-V and ELOVL6 shRNA (m) Lentiviral Particles: sc-62272-V.

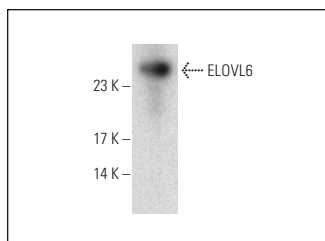
Molecular Weight of ELOVL6: 31 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



ELOVL6 (H-120): sc-135005. Western blot analysis of ELOVL6 expression in mouse brain tissue extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.