

# ELOVL3 (D-20): sc-54875



The Power to Question

## 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). Elongation of very long chain fatty acids protein 3 (ELOVL3), also known as Cig30 (cold-inducible glycoprotein of 30 kDa), is expressed in brown adipose tissue, liver, sebaceous glands of skin and epithelial cells of the hair follicles. It participates in the elongation of saturated and monounsaturated fatty acids of up to 24 carbons. ELOVL3 plays a role in the formation of neutral lipids that are required for proper function of the skin. In response to cold exposure, ELOVL3 is significantly upregulated and is important for lipid accumulation during the recruitment process of brown adipose tissue.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Elov3 (mouse) mapping to 19 C3.

## SOURCE

ELOVL3 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ELOVL3 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-54875 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ELOVL3 (D-20) is recommended for detection of ELOVL3 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for ELOVL3 siRNA (m): sc-62268.

Molecular Weight of ELOVL3: 30 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.