

ACSVL2 (C-12): sc-163634

BACKGROUND

Acyl-coenzyme A synthetases (ACSSs) are a large family of related enzymes known to catalyze the fundamental initial reaction in fatty acid metabolism. The ACS family is roughly characterized based on fatty acid chain length preference amongst different members. The nomenclature in the ACS family reflects this relationship and includes short-chain ACS (ACSS), medium-chain ACS (ACSM), long-chain ACS (ACSL) and very long-chain ACS (ACSVL). ACSVL family members are capable of activating both long (LCFAs) and very long-chain fatty acids (VLCFAs). There are six members of the human ACSVL subfamily, which have been described as solute carrier family 27A (SLC27A) gene products. They represent a group of evolutionarily conserved fatty acid transport proteins (FATPs) recognized for their role in facilitating translocation of long-chain fatty acids across the plasma membrane. The family nomenclature has recently been unified with their respective acyl-CoA synthetase family designations: ACSVL1 (FATP2), ACSVL2 (FATP6), ACSVL3 (FATP3), ACSVL4 (FATP1), ACSVL5 (FATP4) and ACSVL6 (FATP5). ACSVLs have unique expression patterns and are found in major organs of fatty acid metabolism, such as adipose tissue, liver, heart and kidney. ACSVL2 is a 619 amino acid multi-pass membrane protein. Encoded by a gene that maps to human chromosome 5q23.3, ACSVL2 may function as the predominant fatty acid protein transporter in heart.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC27A6 (human) mapping to 5q23.3.

RESEARCH USE

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

SOURCE

ACSVL2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ACSVL2 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.

Blocking peptide available for competition studies, sc-163634 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACSVL2 (C-12) is recommended for detection of ACSVL2 of human 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); non cross-reactive with other ACSVL family members.

Suitable for use as control antibody for ACSVL2 siRNA (h): sc-91716, ACSVL2 shRNA Plasmid (h): sc-91716-SH and ACSVL2 shRNA (h) Lentiviral Particles: sc-91716-V.

Molecular Weight of ACSVL2: 70 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.

PROTOCOLS

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