SANTA CRUZ BIOTECHNOLOGY, INC.

ACSM5 (E-12): sc-137270

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The acyl-CoA synthetase medium-chain (ACSM) family is comprised of ACSM1, ACSM2A, ACSM2B, ACSM3, ACSM4 and ACSM5, which encode for enzymes catalyzing the activation of medium-chain length fatty acids. ACSM5 is a 579 amino acid protein has a broad substrate specificity and utilizes magnesium or manganese as a cofactor. ACSM5 is expressed in kidney and liver. The gene encoding ACSM5 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
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CHROMOSOMAL LOCATION

Genetic locus: ACSM5 (human) mapping to 16p12.3.

SOURCE

ACSM5 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ACSM5 of human origin.

STORAGE

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

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-137270 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACSM5 (E-12) is recommended for detection of ACSM5 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 ACSM family members.

Suitable for use as control antibody for ACSM5 siRNA (h): sc-93223, ACSM5 shRNA Plasmid (h): sc-93223-SH and ACSM5 shRNA (h) Lentiviral Particles: sc-93223-V.

Molecular Weight of ACSM5 isoforms 1/2: 65/23 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.

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.