SANTA CRUZ BIOTECHNOLOGY, INC.

ACSM5 (N-13): sc-137271

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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 16p12.3, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16p12.3 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 16p12.3, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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4. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.
5. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germline breakpoints. Genomics 90: 567-573.
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CHROMOSOMAL LOCATION

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

SOURCE

ACSM5 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-137271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACSM5 (N-13) is recommended for detection of ACSM5 of 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); 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.

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.