SANTA CRUZ BIOTECHNOLOGY, INC.

ACSL5 (C-16): sc-47999

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acyl-CoA synthetases, also known as long-chain fatty-acid CoA synthases (FACL) or Palmitoyl-CoA ligases, include ACSL1-6, which are all single-pass membrane proteins localizing to the mitochondrion, microsome or peroxisome. ACSL proteins are important for synthesis of cellular lipids and for β-oxidation degradation. Specifically, ACSL proteins catalyze the activation of long-chain fatty acids to acyl-CoAs, which can be metabolized to form CO_2, triacylglycerol (TAG), phospholipids (PL) and cholesteryl esters (CE). ACSL5 utilizes a wide range of saturated fatty acids with a preference for C16-C18 unsaturated fatty acids. It is highly expressed in uterus and spleen. A decrease in expression of ACSL5 is correlated with tumorigenesis, including endometrioid adenocarcinomas and colorectal carcinomas. ACSL5 is also useful as a differentiating marker in the gastrointestinal tract.

CHROMOSOMAL LOCATION

Genetic locus: ACSL5 (human) mapping to 10q25.2; Acsl5 (mouse) mapping to 19 D2.

SOURCE

ACSL5 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ACSL5 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, Ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

ACSL5 (C-16) is recommended for detection of short isoform and long isoform of ACSL5 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).

Suitable for use as control antibody for ACSL5 siRNA (h): sc-60621, ACSL5 siRNA (m): sc-60622, ACSL5 shRNA Plasmid (h): sc-60621-SH, ACSL5 shRNA Plasmid (m): sc-60622-SH, ACSL5 shRNA (h) Lentiviral Particles: sc-60621-V and ACSL5 shRNA (m) Lentiviral Particles: sc-60622-V.

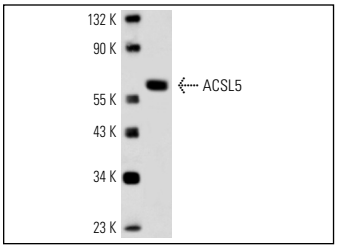
Molecular Weight of ACSL5: 76 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or ACSL5 (m): 293T Lysate: sc-118222.

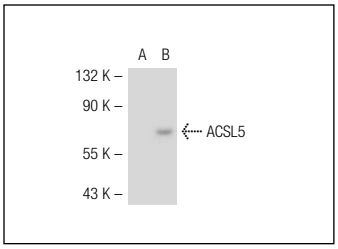
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ACSL5 (C-16): sc-47999. Western blot analysis of ACSL5 expression in Hep G2 whole cell lysate.



ACSL5 (C-16): sc-47999. Western blot analysis of ACSL5 expression in non-transfected: sc-117752 (**A**) and mouse ACSL5 transfected: sc-118222 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chang, Y.S., et al. 2011. ACSL3 and GSK-3β are essential for lipid upregulation induced by endoplasmic reticulum stress in liver cells. J. Cell. Biochem. 112: 881-893.

PROTOCOLS

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