

ACSS2 (G-17): sc-85258

BACKGROUND

ACSS2 (acyl-CoA synthetase short-chain family member 2), also known as ACAS2, ACS, ACSA or AceCS, is a 701 amino acid cytoplasmic protein that belongs to the ATP-dependent AMP-binding enzyme family. Existing as a monomer, ACSS2 functions to catalyze the ATP-dependent activation of acetate, a reaction that yields acetyl-CoA for use in energy generation and lipid synthesis. ACSS2 expression, which is highest in liver and kidney tissue, is regulated by the presence of unsaturated fatty acids and sterol regulatory element-binding proteins (SREBPs). Human ACSS2 exists as two alternatively spliced isoforms and shares 93% sequence identity with its mouse counterpart, suggesting a conserved role between species.

CHROMOSOMAL LOCATION

Genetic locus: ACSS2 (human) mapping to 20q11.22; *Acss2* (mouse) mapping to 2 H1.

SOURCE

ACSS2 (G-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ACSS2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85258 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.

APPLICATIONS

ACSS2 (G-17) is recommended for detection of ACSS2 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), immunohistochemistry (including paraffin-embedded sections) (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 ACSS1.

ACSS2 (G-17) is also recommended for detection of ACSS2 in additional species, including equine and canine.

Suitable for use as control antibody for ACSS2 siRNA (h): sc-72440, ACSS2 siRNA (m): sc-140835, ACSS2 shRNA Plasmid (h): sc-72440-SH, ACSS2 shRNA Plasmid (m): sc-140835-SH, ACSS2 shRNA (h) Lentiviral Particles: sc-72440-V and ACSS2 shRNA (m) Lentiviral Particles: sc-140835-V.

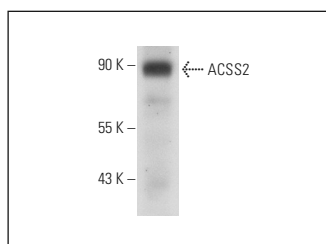
Molecular Weight of ACSS2: 78 kDa.

Positive Controls: mouse liver extract: sc-2256.

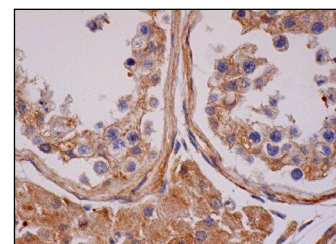
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ACSS2 (G-17): sc-85258. Western blot analysis of ACSS2 expression in mouse liver tissue extract.



ACSS2 (G-17): sc-85258. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts, Leydig cells and Peritubular myoid cells.

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.


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Try **ACSS2 (A-9): sc-398559**, our highly recommended monoclonal alternative to ACSS2 (G-17).