

ACSF2 (D-18): sc-241778

BACKGROUND

ACSF2 (acyl-CoA synthetase family member 2), also known as PPAR γ binding, long chain fatty acid acyl Co-A ligase like, is a 615 amino acid protein belonging to the ATP-dependent AMP-binding enzyme family. Encoded by a gene that maps to human chromosome 17q21.33, ACSF2 contains a PPAR γ -recognition element in its promoter sequence. Exhibiting mitochondrial subcellular localization, ACSF2 forms a thioester with CoA, thereby catalyzing the initial reaction in fatty acid metabolism. ACSF2 participates in ATP binding, ligase activity and adipocyte differentiation, and displays a preference for medium-chain substrates. ACSF2 may be a potential prognostic molecular marker for breast cancer.

REFERENCES

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5. Yao, J., et al. 2006. Combined cDNA array comparative genomic hybridization and serial analysis of gene expression analysis of breast tumor progression. *Cancer Res.* 66: 4065-4078.
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CHROMOSOMAL LOCATION

Genetic locus: ACSF2 (human) mapping to 17q21.33; Acsf2 (mouse) mapping to 11 D.

SOURCE

ACSF2 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ACSF2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241778 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACSF2 (D-18) is recommended for detection of ACSF2 of mouse, rat and 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 ACSF1, ACSF3 or ACSF4.

ACSF2 (D-18) is also recommended for detection of ACSF2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ACSF2 siRNA (h): sc-93920, ACSF2 siRNA (m): sc-140828, ACSF2 shRNA Plasmid (h): sc-93920-SH, ACSF2 shRNA Plasmid (m): sc-140828-SH, ACSF2 shRNA (h) Lentiviral Particles: sc-93920-V and ACSF2 shRNA (m) Lentiviral Particles: sc-140828-V.

Molecular Weight of ACSF2: 68 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.