SANTA CRUZ BIOTECHNOLOGY, INC.

ACOT7 (P-13): sc-104028

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acyl-CoA thioesterases (ACOTs) are a group of enzymes that catalyze the hydrolysis of acyl-CoA to form coenzyme A (CoA) and a free fatty acid. Through their catalytic activity, ACOTs are able to regulate the level of fatty acids and acyl-CoAs within the cell. ACOT7 (acyl-CoA thioesterase 7), also known as BACH (brain acyl-CoA hydrolase), LACH or CTE-II, is a 380 amino acid protein that is expressed as 6 alternatively spliced isoforms which localize to either the cytoplasm or the mitochondria. Functioning as a homodimer that contains 2 acyl coenzyme A hydrolase domains, ACOT7 plays an important role in regulating acyl-CoA levels within the body and is thought to specifically participate in proper brain physiology and function. Decreased ACOT7 expression may be associated with mesial temporal lobe epilepsy, a form of focal epilepsy that is characterized by simple or complex seizures.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ACOT7 (human) mapping to 1p36.31; Acot7 (mouse) mapping to 4 E2.

SOURCE

ACOT7 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ACOT7 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, sc-104028 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACOT7 (P-13) is recommended for detection of ACOT7 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).

ACOT7 (P-13) is also recommended for detection of ACOT7 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ACOT7 siRNA (h): sc-88501, ACOT7 siRNA (m): sc-105035, ACOT7 shRNA Plasmid (h): sc-88501-SH, ACOT7 shRNA Plasmid (m): sc-105035-SH, ACOT7 shRNA (h) Lentiviral Particles: sc-88501-V and ACOT7 shRNA (m) Lentiviral Particles: sc-105035-V.

Molecular Weight of ACOT7 isoforms B/A-X/A-Xi: 42/27/31 kDa.

Molecular Weight of ACOT7 isoforms A/C/D: 37/39/37 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.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **ACOT7 (C-2): sc-376808** or **ACOT7 (B-4): sc-376692**, our highly recommended monoclonal alternatives to ACOT7 (P-13).