

# ACOT7 (H-300): sc-135339

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

ACOT7 (H-300) is a rabbit polyclonal antibody raised against amino acids 81-380 mapping at the C-terminus 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.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

ACOT7 (H-300) 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), 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).

ACOT7 (H-300) 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.

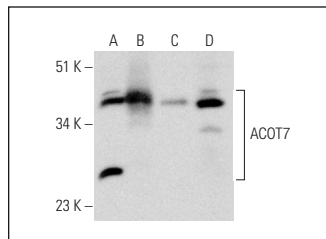
Molecular Weight of ACOT7 isoforms A/C/D: 37/39/37 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, U-251-MG whole cell lysate: sc-364176 or mouse brain extract: sc-2253.

## 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.

## DATA



ACOT7 (H-300): sc-135339. Western blot analysis of ACOT7 expression in Jurkat (A), SK-MEL-28 (B) and U-251 MG (C) whole cell lysates and mouse brain tissue extract (D).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **ACOT7 (C-2): sc-376808** or **ACOT7 (B-4): sc-376692**, our highly recommended monoclonal alternatives to ACOT7 (H-300).