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ACAT-2 (m): 293T Lysate: sc-118189

BACKGROUND

ACAT-1 (acetyl-coenzyme A acetyltransferase 1) is a mitochondrial enzyme involved in the formation and degradation of ketone bodies and is necessary for the proper metabolic processing of isoleucine. Rare defects in the gene encoding ACAT-1 lead to β -ketothiolase deficiency, which is characterized by ketoacidotic attacks. ACAT-2 (acetyl-coenzyme A acetyltransferase 2) is considered a cytosolic protein and is crucial for cholesterol synthesis. Specifically, both acetoacetyl-CoA specific thiolases, ACAT-1 and ACAT-2 catalyze the formation of acetoacetyl-CoA from two acetyl-CoA molecules. These enzymes are also capable of the reverse reaction, the cleavage of acetoacetyl-CoA into two acetyl-CoA molecules.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Acat2* (mouse) mapping to 17 A1.

PRODUCT

ACAT-2 (m): 293T Lysate represents a lysate of mouse ACAT-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

ACAT-2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ACAT-2 antibodies. Recommended use: 10-20 μ l per lane.

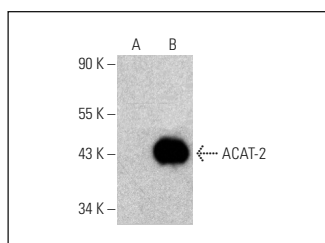
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ACAT-2 (4A5): sc-293307 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ACAT-2 expression in ACAT-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ACAT-2 (4A5): sc-293307. Western blot analysis of ACAT-2 expression in non-transfected: sc-117752 (A) and mouse ACAT-2 transfected: sc-118189 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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