

# ACAA2 (h): 293T Lysate: sc-172444

## BACKGROUND

Mammalian tissues contain five types of thiolases, all of which participate in metabolism of various compounds throughout the body. ACAA2 (acetyl-Coenzyme A acyltransferase 2), also known as DSAEC, is a 397 amino acid member of the thiolase family of enzymes and is involved in lipid metabolism. Localized to the mitochondrion, ACAA2 catalyzes the last step, namely the conversion of acetyl-CoA to 3-oxoacyl-CoA, in the fatty acid oxidation pathway. ACAA2 is highly expressed in liver, fibroblasts and intercostal muscle and contains an N-terminal targeting signal that, unlike other mitochondrial proteins, is non-cleavable. Human ACAA2 shares 86.6% amino acid identity with its rat counterpart, suggesting a conserved function for ACAA2 among different species.

## REFERENCES

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3. Doi, M., Kondo, Y. and Tsutsumi, K. 2003. Lipoprotein lipase activator NO-1886 (ibrolipim) accelerates the mRNA expression of fatty acid oxidation-related enzymes in rat liver. *Metab. Clin. Exp.* 52: 1547-1550.
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5. de Boer, V.C., van Schothorst, E.M., Dihal, A.A., van der Woude, H., Arts, I.C., Rietjens, I.M., Hollman, P.C. and Keijer, J. 2006. Chronic quercetin exposure affects fatty acid catabolism in rat lung. *Cell. Mol. Life Sci.* 63: 2847-2858.

## CHROMOSOMAL LOCATION

Genetic locus: ACAA2 (human) mapping to 18q21.1.

## PRODUCT

ACAA2 (h): 293T Lysate represents a lysate of human ACAA2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

ACAA2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ACAA2 antibodies. Recommended use: 10-20 µl per lane.

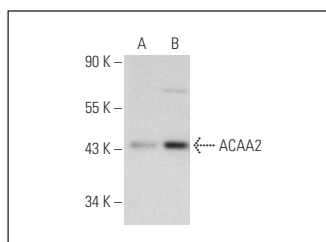
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ACAA2 (192): sc-100847 is recommended as a positive control antibody for Western Blot analysis of enhanced human ACAA2 expression in ACAA2 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



ACAA2 (192): sc-100847. Western blot analysis of ACAA2 expression in non-transfected: sc-117752 (A) and human ACAA2 transfected: sc-172444 (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](http://www.scbt.com) for detailed protocols and support products.