

ACBP (h): 293T Lysate: sc-116768

BACKGROUND

Long chain acyl-CoA esters (LCAs) act as both substrates and intermediates in metabolism, and as regulators of various intracellular functions. Acyl-CoA binding protein (ACBP) specifically binds to LCA with high affinity and regulates its availability. ACBP is structurally and functionally conserved among a diverse group of organisms, including human, rat, frog, insect, plant and yeast. DBI, the gene encoding human ACBP, which maps to chromosome 2, is highly expressed in liver, soleus muscle and heart. The ACBP protein is also abundant in cells with a high level of lipogenesis and *de novo* fatty acid synthesis. Expression of ACBP is significantly induced during adipocyte differentiation. DBI is a target gene for proliferator-activated receptor (PPAR) γ , and is directly activated by PPAR γ /RXR α and PPAR α /RXR α , but not by PPAR δ /RXR α . In addition to acyl-CoA binding and transport, ACBP is also implicated in γ -aminobutyric acid type A receptor binding, steroidogenesis and peptide hormone release.

REFERENCES

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3. Gersuk, V.H., et al. 1995. Molecular cloning and chromosomal localization of a pseudogene related to the human Acyl-CoA-binding protein/diazepam-binding inhibitor. *Genomics* 25: 469-476.
4. Swinnen, J.V., et al. 1998. Identification of diazepam-binding inhibitor/Acyl-CoA-binding protein as a sterol regulatory element-binding protein-responsive gene. *J. Biol. Chem.* 273: 19938-19944.
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CHROMOSOMAL LOCATION

Genetic locus: DBI (human) mapping to 2q14.2.

PRODUCT

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

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.

APPLICATIONS

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

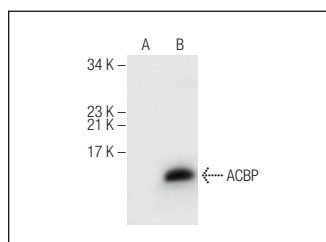
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ACBP (C-9): sc-376853 is recommended as a positive control antibody for Western Blot analysis of enhanced human ACBP expression in ACBP 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



ACBP (C-9): sc-376853. Western blot analysis of ACBP expression in non-transfected: sc-117752 (A) and human ACBP transfected: sc-116768 (B) 293T whole cell lysates.

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.