SANTA CRUZ BIOTECHNOLOGY, INC.

ACLP/AEBP1 (E-13): sc-21453

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The Power to Question

BACKGROUND

Aortic carboxypeptidase-like protein (ACLP), of which adipocyte enhancer binding protein 1 (AEBP1) is an isoform, is a transcriptional repressor with carboxypeptidase activity that is expressed in vascular smooth muscle cells, and at lower levels in adipose and osteoblastic cells. ACLP contains a signal peptide sequence, a lysine- and proline-rich repeating motif, a discoidin-like protein and a carboxypeptidase-like domain. ACLP is secreted into the extracellular matrix and may play a role in abdominal wall development and dermal wound healing. Additionally, ACLP is downregulated during adipogenesis and upregulated during vascular smooth muscle cell differentiation, suggesting a possible role in tissue development. AEBP1, which may function as a transcriptional repressor, is a truncated form of ACLP which specifically lacks a 380 amino acid N-terminal sequence.

REFERENCES

1. Layne, M.D., Endege, W.O., Jain, M.K., Yet, S.F., Hsieh, C.M., Chin, M.T., Perrella, M.A., Blanar, M.A., Haber, E. and Lee, M.E. 1998. Aortic carboxypeptidase-like protein, a novel protein with discoidin and carboxypeptidase-like domains, is up-regulated during vascular smooth muscle cell differentiation. J. Biol. Chem. 273: 15654-15660.
2. Ro, H.S., Kim, S.W., Wu, D., Webber, C. and Nicholson, T.E. 2001. Gene structure and expression of the mouse adipocyte enhancer-binding protein. Gene 280: 123-133.
3. Layne, M.D., Yet, S.F., Maemura, K., Hsieh, C.M., Bernfield, M., Perrella, M.A. and Lee, M.E. 2001. Impaired abdominal wall development and deficient wound healing in mice lacking aortic carboxypeptidase-like protein. Mol. Cell. Biol. 21: 5256-5261.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 602981. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: AEBP1 (human) mapping to 7p13; Aebp1 (mouse) mapping to 11 A1.

SOURCE

ACLP/AEBP1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ACLP/AEBP1 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-21453 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ACLP/AEBP1 (E-13) is recommended for detection of ACLP and AEBP1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ACLP/AEBP1 (E-13) is also recommended for detection of ACLP and AEBP1 in additional species, including bovine.

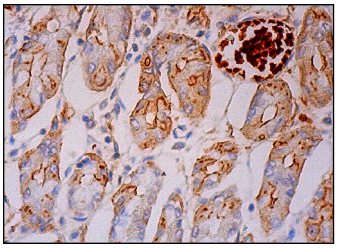
Suitable for use as control antibody for ACLP/AEBP1 siRNA (h): sc-40327, ACLP/AEBP1 siRNA (m): sc-40328, ACLP/AEBP1 shRNA Plasmid (h): sc-40327-SH, ACLP/AEBP1 shRNA Plasmid (m): sc-40328-SH, ACLP/AEBP1 shRNA (h) Lentiviral Particles: sc-40327-V and ACLP/AEBP1 shRNA (m) Lentiviral Particles: sc-40328-V.

Molecular Weight of ACLP: 130 kDa.

Molecular Weight of AEBP1: 83 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, 3T3-L1 cell lysate: sc-2243 or mouse heart extract: sc-2254.

DATA



ACLP/AEBP1 (E-13): sc-21453. Immunoperoxidase staining of formalin fixed, paraffin-embedded lower stomach tissue showing erythrocyte staining and membrane staining of glandular cells.

RESEARCH USE

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

PROTOCOLS

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