

# ACLP/AEBP1 (M-17): sc-23056

## 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., et al. 1998. Aortic carboxypeptidase-like protein, a novel protein with discoidin and carboxypeptidase-like domains, is upregulated during vascular smooth muscle cell differentiation. *J. Biol. Chem.* 273: 15654-15660.
2. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 602981. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Layne, M.D., et al. 2001. Impaired abdominal wall development and deficient wound healing in mice lacking aortic carboxypeptidase-like protein. *Mol. Cell. Biol.* 21: 5256-5261.
4. Ro, H.S., et al. 2001. Gene structure and expression of the mouse adipocyte enhancer-binding protein. *Gene* 280: 123-133.
5. Layne, M.D., et al. 2002. Characterization of the mouse aortic carboxypeptidase-like protein promoter reveals activity in differentiated and dedifferentiated vascular smooth muscle cells. *Circ. Res.* 90: 728-736.
6. LocusLink Report (LocusID: 165). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Aebp1 (mouse) mapping to 11 A1.

## SOURCE

ACLP/AEBP1 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ACLP/AEBP1 of mouse 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-23056 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 (M-17) is recommended for detection of ACLP and AEBP1 of mouse and rat 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).

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

Molecular Weight of ACLP: 175 kDa.

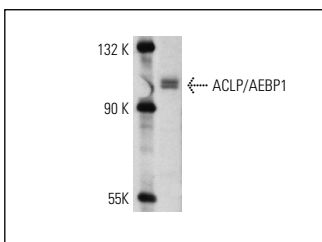
Molecular Weight of AEBP1: 83 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



ACLP/AEBP1 (M-17): sc-23056. Western blot analysis of ACLP/AEBP1 expression in 3T3-L1 whole cell lysate.

## 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.