

C/EBP α (m): 293T Lysate: sc-126522

BACKGROUND

The transcription factor C/EBP α (CCAAT-enhancer binding protein) is a heat-stable, sequence-specific DNA-binding protein that binds avidly to several different *cis*-regulatory DNA sequences commonly associated with viral and cellular genes transcribed by RNA polymerase II. C/EBP α regulates gene expression in a variety of tissues including liver, adipose, lung and intestine. C/EBP α is a basic region/leucine zipper transcription factor selectively expressed during the differentiation of liver, adipose tissue, blood cells and the endocrine pancreas. C/EBP α uses a bipartite structural motif to bind DNA and appears to function exclusively in terminally differentiated, growth-arrested cells. In the liver, C/EBP α is a transactivator of several genes, which are regulated by growth hormone. Growth hormone enhances not only the levels of C/EBP α mRNA and protein, but also the DNA-binding activity of C/EBP α . C/EBP α functions as an important transcription factor that regulates different genes, including prolactin gene expression.

REFERENCES

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3. Birkenmeier, E.H., et al. 1989. Tissue-specific expression, developmental regulation, and genetic mapping of the gene encoding CCAAT/enhancer binding protein. *Genes Dev.* 3: 1146-1156.
4. Cao, Z., et al. 1991. Regulated expression of three C/EBP isoforms during adipose conversion of 3T3-L1 cells. *Genes Dev.* 5: 1538-1552.
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7. Yiangou, M., et al. 1998. Induction of a subgroup of acute phase protein genes in mouse liver by hyperthermia. *Biochim. Biophys. Acta* 1396: 191-206.
8. Jacob, K.K., et al. 1999. CCAAT/enhancer-binding protein α is a physiological regulator of prolactin gene expression. *Endocrinology* 140: 4542-4550.
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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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: *Cebpa* (mouse) mapping to 7 B1.

PRODUCT

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

APPLICATIONS

C/EBP α (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive C/EBP α 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.

RESEARCH USE

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