

C/EBP β (Δ 198): sc-746

BACKGROUND

CCAAT-enhancer binding proteins (C/EBP) are basic region/leucine zipper (bZIP) transcription factors selectively expressed during the differentiation of liver, adipose tissue, blood cells and the endocrine pancreas. C/EBP β is a member of the C/EBP transcription factor family. The C/EBP β gene encodes several isoforms containing truncated transcription activation domains due to the alternative translational initiation at multiple AUG start sites. Initiation of translation at the in-frame AUGs forms four C/EBP β isoforms. C/EBP β is also known as interleukin 6-dependent DNA-binding protein (IL6DBP), liver activator protein (LAP) or liver-enriched transcriptional activator protein transcription factor 5 (TCF5). C/EBP β contributes to the regulation of the acute phase response in hepatocytes. Stat3 has an important function in IL-6-mediated transcription of the C/EBP β gene that has direct implication for acute phase response in liver cells.

SOURCE

C/EBP β (Δ 198) is a rabbit polyclonal antibody raised against amino acids 199-345 of C/EBP β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-746 X, 200 μ g/0.1 ml.

APPLICATIONS

C/EBP β (Δ 198) is recommended for detection of C/EBP β , C/EBP α , C/EBP δ and C/EBP ϵ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

C/EBP β (Δ 198) is also recommended for detection of C/EBP β , C/EBP α , C/EBP δ and C/EBP ϵ in additional species, including porcine.

C/EBP β (Δ 198) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of C/EBP β : 45 kDa.

Positive Controls: C/EBP β (h): 293T Lysate: sc-176940, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

STORAGE

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

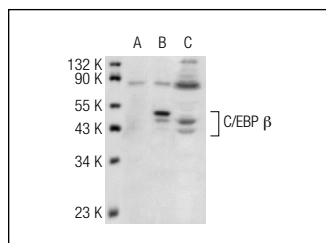
PROTOCOLS

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

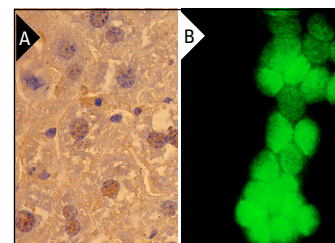
RESEARCH USE

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

DATA



C/EBP β (Δ 198): sc-746. Western blot analysis of C/EBP β expression in non-transfected 293T: sc-117752 (A), human C/EBP β transfected 293T: sc-176940 (B) and Jurkat (C) whole cell lysates.



C/EBP β (Δ 198): sc-746. Immunoperoxidase staining of formalin-fixed, paraffin-embedded mouse liver tissue showing nuclear staining of select cells (A). Immunofluorescence staining of methanol-fixed MCF7 cells showing nuclear localization (B).

SELECT PRODUCT CITATIONS

- Li-Webber, M., et al. 1997. Differential interaction of nuclear factors with the PRE-I enhancer element of the human IL-4 promoter in different T cell subsets. *J. Immunol.* 158: 1194-1200.
- Riancho, J.A., et al. 2009. Association of the aromatase gene alleles with BMD: epidemiological and functional evidence. *J. Bone Miner. Res.* 24: 1709-1718.
- Bernot, D., et al. 2010. Down-regulation of tissue inhibitor of metalloproteinase-3 (TIMP-3) expression is necessary for adipocyte differentiation. *J. Biol. Chem.* 285: 6508-6514.
- Shimokawa, T., et al. 2010. Amino acid residues in the β 3 strand and subsequent loop of the conserved ETS domain that mediate basic leucine zipper (bZIP) recruitment and potentially distinguish functional attributes of Ets proteins. *Biochem. J.* 430: 129-139.
- Shi, X., et al. 2010. C/EBP- β drives expression of the nutritionally regulated promoter 1A of the acetyl-CoA carboxylase- α gene in cattle. *Biochim. Biophys. Acta* 1799: 561-567.
- Gong, F., et al. 2011. The BCL2 gene is regulated by a special AT-rich sequence binding protein 1-mediated long range chromosomal interaction between the promoter and the distal element located within the 3'-UTR. *Nucleic Acids Res.* 39: 4640-4652.
- Casar, B., et al. 2012. Mxi2 sustains ERK1/2 phosphorylation in the nucleus by preventing ERK1/2 binding to phosphatases. *Biochem. J.* 441: 571-578.



Try **C/EBP β (H-7): sc-7962** or **C/EBP β (A-7): sc-398753**, our highly recommended monoclonal alternatives to C/EBP β (Δ 198). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **C/EBP β (H-7): sc-7962**.