

CBP (451): sc-1211

BACKGROUND

Cyclic AMP-regulated gene expression frequently involves a DNA element designated the cAMP-regulated enhancer (CRE). Many transcription factors bind to this element, including the protein CREB, which is activated as a result of phosphorylation by protein kinase A. It has been shown that protein kinase A-mediated CREB phosphorylation results in its binding to a nuclear protein designated CBP (for CREB-binding protein). These findings suggest that CBP has many of the properties expected of a CREB co-activator. Another high molecular weight transcriptional adapter protein, designated p300, is characterized by three cysteine- and histidine-rich regions, of which the most carboxy terminal region specifically binds the adenovirus E1A protein. p300 molecules lacking an intact E1A binding site bypass E1A repression, even in the presence of high concentrations of E1A. Sequence analysis of CBP and p300 has revealed substantial homology, arguing that these proteins are members of a conserved family of co-activators.

CHROMOSOMAL LOCATION

Genetic locus: CREBBP (human) mapping to 16p13.3; Crebbp (mouse) mapping to 16 A1.

SOURCE

CBP (451) is a rabbit polyclonal antibody raised against amino acids 451-720 mapping within the CREB Binding Domain of CBP 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-1211 X, 200 µg/0.1 ml.

APPLICATIONS

CBP (451) is recommended for detection of CBP p265 and p300 of mouse, rat and human 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).

CBP (451) is also recommended for detection of CBP p265 and p300 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CBP siRNA (h): sc-29244, CBP siRNA (m): sc-29243, CBP shRNA Plasmid (h): sc-29244-SH, CBP shRNA Plasmid (m): sc-29243-SH, CBP shRNA (h) Lentiviral Particles: sc-29244-V and CBP shRNA (m) Lentiviral Particles: sc-29243-V.

CBP (451) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of CBP: 265 kDa.

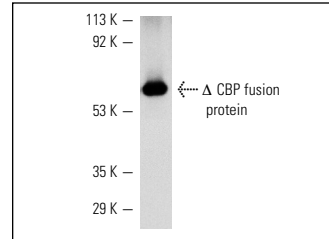
RESEARCH USE

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

STORAGE

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

DATA



CBP (451): sc-1211. Western blot analysis of truncated rat recombinant CBP CREB binding domain fusion protein.

SELECT PRODUCT CITATIONS

1. Thornborrow, E.C., et al. 2001. The tumor suppressor protein p53 requires a cofactor to activate transcriptionally the human BAX promoter. *J. Biol. Chem.* 276: 15598-15608.
2. Duan, Z., et al. 2001. Role NF- κ B in *in vivo* regulation of the γ -globin gene. *Mol. Cell. Biol.* 21: 3083-3095.
3. Bost, F., et al. 2001. The defective transforming phenotype of c-Jun Ala(63/73) is rescued by mutation of the C-terminal phosphorylation site. *Oncogene* 20: 7425-7429.
4. Ye, S.K., et al. 2001. The IL-7 receptor controls the accessibility of the TCR γ locus by Stat5 and histone acetylation. *Immunity* 15: 813-823.
5. Lee, H.K., et al. 2007. MED25 is distinct from TRAP220/MED1 in cooperating with CBP for retinoid receptor activation. *EMBO J.* 26: 3545-3557.
6. Chen, J., et al. 2009. Gonadotropin-releasing hormone-mediated phosphorylation of estrogen receptor- α contributes to fosB expression in mouse gonadotrophs. *Endocrinology* 150: 4583-4593.
7. Cook, P.R., et al. 2011. HTLV-1 HBZ protein deregulates interactions between cellular factors and the KIX domain of p300/CBP. *J. Mol. Biol.* 409: 384-398.
8. Youn, H.S., et al. 2011. PTOV1 antagonizes MED25 in RAR transcriptional activation. *Biochem. Biophys. Res. Commun.* 404: 239-244.
9. Chera, S., et al. 2011. Injury-induced activation of the MAPK/CREB pathway triggers apoptosis-induced compensatory proliferation in hydra head regeneration. *Dev. Growth Differ.* 53: 186-201.


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