

CBP (F-4): sc-271974

BACKGROUND

Cyclic AMP-regulated gene expression frequently involves a DNA element designated the cAMP-regulated enhancer (CRE). Many transcription factors, including the protein CREB, which is activated as a result of phosphorylation by protein kinase A, bind to this element. 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 (F-4) is a mouse monoclonal antibody raised against a sequence mapping within the CREB Binding Domain of CBP of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-271974 X, 200 µg/0.1 ml.

APPLICATIONS

CBP (F-4) is recommended for detection of CBP p265 and p300 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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).

Suitable for use as control antibody for CBP siRNA (h): sc-29244, CBP siRNA (m): sc-29243, CBP siRNA (r): sc-270612, CBP shRNA Plasmid (h): sc-29244-SH, CBP shRNA Plasmid (m): sc-29243-SH, CBP shRNA Plasmid (r): sc-270612-SH, CBP shRNA (h) Lentiviral Particles: sc-29244-V, CBP shRNA (m) Lentiviral Particles: sc-29243-V and CBP shRNA (r) Lentiviral Particles: sc-270612-V.

CBP (F-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

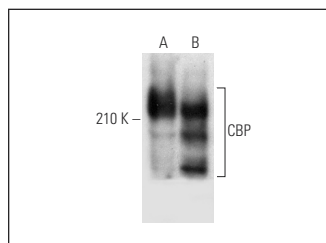
Molecular Weight of CBP: 265 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, KNRK nuclear extract: sc-2141 or 3611-RF nuclear extract: sc-2143.

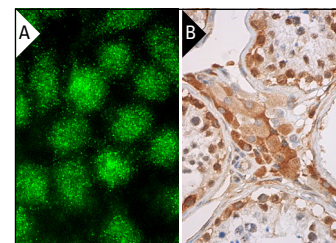
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CBP (F-4): sc-271974. Western blot analysis of CBP expression in KNRK (A) and 3611-RF (B) nuclear extracts.



CBP (F-4): sc-271974. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



See **CBP (C-1): sc-7300** for CBP antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.