

p-CREB-2 (Ser 245): sc-101639

BACKGROUND

Eukaryotic gene transcription is regulated by sequence-specific transcription factors which bind modular cis-acting promoter and enhancer elements. The cAMP response element (CRE), one of the best studied of such elements, consists of the palindromic octanucleotide TGACGTCA. Several CRE binding proteins have been identified within the ATF/CREB family, the best characterized of which include CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. These proteins share highly related COOH terminal leucine zipper dimerization and basic DNA binding domains but are highly divergent in their amino terminal domains. Although each of the ATF/CREB proteins appear capable of binding CRE in its homodimeric form, certain of these also bind as heterodimers, both within the ATF/CREB family and even with members of the AP-1 transcription factor family.

REFERENCES

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3. Hoeffler, J.P., et al. 1988. Cyclic AMP-responsive DNA-binding protein: structure based on a cloned placental cDNA. *Science* 242: 1430-1433.
4. Hai, T., et al. 1989. Transcription factor ATF cDNA clones: an extensive family of leucine zipper proteins able to selectively form DNA-binding heterodimers. *Genes Dev.* 8: 2083-2090.
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8. Ferrer, I. et al. 1996. CREB-1 and CREB-2 immunoreactivity in the rat brain. *Brain Res.* 712:159-164.
9. Gachon, F. et al. 1998. CREB-2, a cellular CRE-dependent transcription repressor, functions in association with Tax as an activator of the human T-cell leukemia virus type 1 promoter. *J. Virol.* 72:8332-8337.

CHROMOSOMAL LOCATION

Genetic locus: ATF4 (human) mapping to 22q13.1.

SOURCE

p-CREB-2 (Ser 245) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 245 of CREB-2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p-CREB-2 (Ser 245) is recommended for detection of Ser 245 phosphorylated CREB-2 of human origin by immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

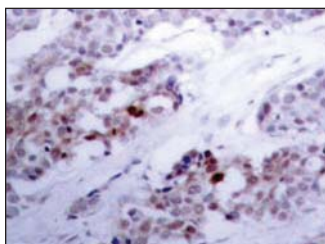
Suitable for use as control antibody for CREB-2 siRNA (h): sc-35112.

Molecular Weight of p-CREB-2: 38 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 2) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



p-CREB-2 (Ser 245): sc-101639. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue extract showing nuclear localization.

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 or our catalog for detailed protocols and support products.