# CRE-BPa (H-68): sc-50514



The Power to Question

#### **BACKGROUND**

The ATF/CREB family consists of a series of transcription factors that function by binding to the cAMP responsive element (CRE) palindromic octanucleotide, TGACCTCA. The best characterized members of this gene family include CREB-1, CREB-2 (also designated ATF-4), CRE-BPa, LZIP (also designated CREB-3 and Luman), CREM-2, ATF-1, ATF-2, ATF-3, ATF-5, ATF-6 and ATF-7. These transcription factors share terminal leucine zipper dimerization and basic DNA binding domains and are highly variable in their N-termini. Although each of the ATF/CREB proteins bind CREs in their homodimeric form, they can also bind as heterodimers, both within the ATF/CREB family and with members of the AP-1 transcription factor family. Protein kinase A-mediated CREB phosphorylation induces association with a nuclear protein designated CBP (CREB-binding protein), which may represent a CREB coactivator. CRE-BPa is a nuclear protein that binds DNA as a homodimer but can also form a hetero-dimer with ATF-2 or Jun.

## CHROMOSOMAL LOCATION

Genetic locus: CREB5 (human) mapping to 7p15.1; Creb5 (mouse) mapping to 6 B3.

#### SOURCE

CRE-BPa (H-68) is a rabbit polyclonal antibody raised against amino acids 441-508 mapping at the C-terminus of CRE-BPa of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG 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-50514 X, 200  $\mu g$ /0.1 ml.

## **APPLICATIONS**

CRE-BPa (H-68) is recommended for detection of CRE-BPa 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).

CRE-BPa (H-68) is also recommended for detection of CRE-BPa in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CRE-BPa siRNA (h): sc-45639, CRE-BPa siRNA (m): sc-45640, CRE-BPa shRNA Plasmid (h): sc-45639-SH, CRE-BPa shRNA Plasmid (m): sc-45640-SH, CRE-BPa shRNA (h) Lentiviral Particles: sc-45639-V and CRE-BPa shRNA (m) Lentiviral Particles: sc-45640-V.

CRE-BPa (H-68) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

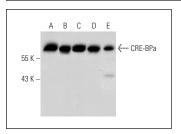
Molecular Weight of CRE-BPa: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or CCRF-CEM nuclear extract: sc-2146.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 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.

## **DATA**



CRE-BPa (H-68): sc-50514. Western blot analysis of CRE-BPa expression in HeLa (A), CCRF-CEM (B), RAW 264.7 (C) and A-431 (D) nuclear extracts and HeLa whole cell Ivsate (E).

## **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.



Try **CRE-BPa (G420): sc-130435**, our highly recommended monoclonal alternative to CRE-BPa (H-68).

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