

ATF-3 (C-19): sc-188

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.

CHROMOSOMAL LOCATION

Genetic locus: ATF3 (human) mapping to 1q32.3; Atf3 (mouse) mapping to 1 H6.

SOURCE

ATF-3 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ATF-3 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-188 X, 100 µg/0.1 ml.

Blocking peptide available for competition studies, sc-188 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ATF-3 (C-19) is recommended for detection of ATF-3 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).

ATF-3 (C-19) is also recommended for detection of ATF-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ATF-3 siRNA (h): sc-29757, ATF-3 siRNA (m): sc-29758, ATF-3 shRNA Plasmid (h): sc-29757-SH, ATF-3 shRNA Plasmid (m): sc-29758-SH, ATF-3 shRNA (h) Lentiviral Particles: sc-29757-V and ATF-3 shRNA (m) Lentiviral Particles: sc-29758-V.

ATF-3 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

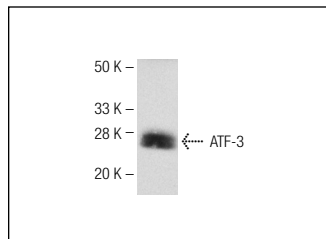
Molecular Weight of ATF-3: 21 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211 or Taurolidine (sc-202827) treated HT-1080 whole cell lysate.

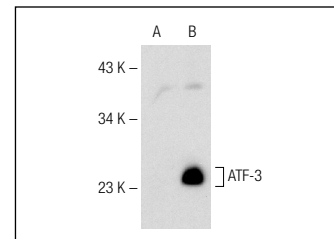
STORAGE

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

DATA



ATF-3 (C-19): sc-188. Western blot analysis of ATF-3 expression in RAW 264.7 whole cell lysate.



ATF-3 (C-19): sc-188. Western blot analysis of ATF-3 expression in untreated (A) and Taurolidine (sc-202827) treated (B) HT-1080 whole cell lysates. Note upregulation of ATF-3 expression in lane B.

SELECT PRODUCT CITATIONS

- Chen, B.P., et al. 1996. Analysis of ATF-3, a transcription factor induced by physiological stresses and modulated by GADD 153/CHOP 10. *Mol. Cell. Biol.* 16: 1157-1168.
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- Horrix, C., et al. 2011. Plant ribosome-inactivating proteins type II induce the unfolded protein response in human cancer cells. *Cell. Mol. Life Sci.* 68: 1269-1281.
- Zhang, Z.J., et al. 2012. Chemokine CCL2 and its receptor CCR2 in the medullary dorsal horn are involved in trigeminal neuropathic pain. *J. Neuroinflammation* 9: 136.
- Shan J., et al. 2013. Activation of the amino acid response modulates lineage specification during differentiation of murine embryonic stem cells. *Am. J. Physiol. Endocrinol. Metab.* 305: E325-E335.
- Archambaud, C., et al. 2013. The intestinal microbiota interferes with the microRNA response upon oral *Listeria* infection. *MBio* 4: e00707-e00713.
- Hollis, E.R., et al. 2015. A novel and robust conditioning lesion induced by ethidium bromide. *Exp. Neurol.* 265: 30-39.

RESEARCH USE

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



Try **ATF-3 (44C3a): sc-81189**, our highly recommended monoclonal alternative to ATF-3 (C-19).