SANTA CRUZ BIOTECHNOLOGY, INC.

ATF-5 (N-17): sc-46935

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Eukaryotic gene transcription is regulated by sequence-specific transcription factors that bind modular *cis* acting promoter and enhancer elements. The ATF/CREB transcription factor family binds the palindromic cAMP response element (CRE) octanucleotide TGACGTCA. 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-1, CREM-2, ATF-1, ATF-2, ATF-3, ATF-5, ATF-6 and ATF-7.This family of proteins contain highly divergent N-terminal domains, but share a C-terminal leucine zipper for dimerization and DNA binding. ATF-5 (ATFx), which can localize to the cytoplasm or the nucleus, binds DNA as a dimer. It interacts with CCND3 and PTP4A1.

CHROMOSOMAL LOCATION

Genetic locus: ATF5 (human) mapping to 19q13.33; Atf5 (mouse) mapping to 7 B4.

SOURCE

ATF-5 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ATF-5 of human origin.

PRODUCT

Each vial contains 200 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-46935 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-46935 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

ATF-5 (N-17) is recommended for detection of ATF-5 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); may cross-react with ATF-7 in mouse.

Suitable for use as control antibody for ATF-5 siRNA (h): sc-43580, ATF-5 siRNA (m): sc-60222, ATF-5 shRNA Plasmid (h): sc-43580-SH, ATF-5 shRNA Plasmid (m): sc-60222-SH, ATF-5 shRNA (h) Lentiviral Particles: sc-43580-V and ATF-5 shRNA (m) Lentiviral Particles: sc-60222-V.

ATF-5 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

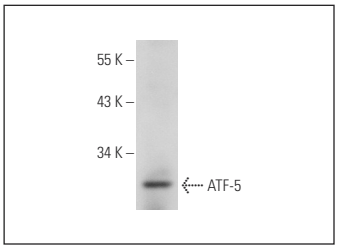
Molecular Weight of ATF-5: 31 kDa.

Positive Controls: mouse heart extract: sc-2254.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ATF-5 (N-17): sc-46935. Western blot analysis of ATF-5 expression in mouse heart tissue extract.

SELECT PRODUCT CITATIONS

1. Wei, Y., et al. 2010. Identification and characterization of the promoter of human ATF5 gene. J. Biochem. 148: 171-178.

PROTOCOLS

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