SANTA CRUZ BIOTECHNOLOGY, INC.

TBX3 (H-92): sc-48781

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The T-box (TBX) motif is present in a family of genes whose structural features and expression patterns support their involvement in developmental gene regulation. The TBX gene family are largely conserved throughout metazoan evolution, and these genes code for putative transcription factors that share a uniquely defining DNA-binding domain. TBX genes are a family of developmental regulators with more than 20 members recently identified in invertebrates and vertebrates. Mutations in TBX genes are associated with the onset of several human diseases. Our understanding of functional mechanisms of TBX products has come mainly from the prototypical T/Brachyury, which is a transcription activator. The TBX genes constitute a family of transcriptional regulatory genes that are implicated in a variety of developmental processes ranging from the formation of germ layers to the organizational patterning of the central nervous system.

CHROMOSOMAL LOCATION

Genetic locus: TBX3 (human) mapping to 12q24.21; Tbx3 (mouse) mapping to 5 F.

SOURCE

TBX3 (H-92) is a rabbit polyclonal antibody raised against amino acids 320-411 mapping within an internal region of TBX3 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48781 X, 200 µg/0.1 ml.

APPLICATIONS

TBX3 (H-92) is recommended for detection of TBX3 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).

TBX3 (H-92) is also recommended for detection of TBX3 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TBX3 siRNA (h): sc-37018, TBX3 siRNA (m): sc-37019, TBX3 shRNA Plasmid (h): sc-37018-SH, TBX3 shRNA Plasmid (m): sc-37019-SH, TBX3 shRNA (h) Lentiviral Particles: sc-37018-V and TBX3 shRNA (m) Lentiviral Particles: sc-37019-V.

TBX3 (H-92) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

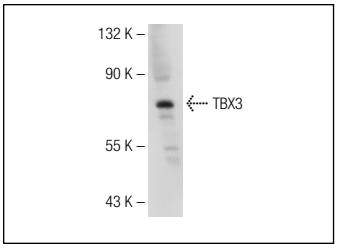
Molecular Weight of TBX3: 80 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, MCF7 nuclear extract: sc-2149 or PC-3 nuclear extract: sc-2152.

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



TBX3 (H-92): sc-48781. Western blot analysis of TBX3 expression in IMR-32 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.

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.