SANTA CRUZ BIOTECHNOLOGY, INC.

TBX19 (N-18): sc-17894

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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 encode for putative transcription factors that share a uniquely defining DNA-binding domain and are implicated in a variety of developmental processes, ranging from the formation of germ layers to the organizational patterning of the central nervous system. TBX genes encode a family of developmental regulators with more than 20 members recently identified in invertebrates and vertebrates, one of which is TBX19, a 448 amino acid nuclear protein. Our understanding of functional mechanisms of TBX proteins has come mainly from the prototypical T/Brachyury, which is a transcriptional activator. Mutations in TBX genes are associated with the onset of several human diseases.

REFERENCES

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2. Agulnik, S.I., Papaioannou, V.E. and Silver, L.M. 1998. Cloning, mapping, and expression analysis of TBX15, a new member of the T-box gene family. Genomics 51: 68-75.
3. Dheen, T., Sleptsova-Friedrich, I., Xu, Y., Clark, M., Lehrach, H., Gong, Z. and Korzh, V. 1999. Zebrafish TBX-C functions during formation of midline structures. Development 126: 2703-2713.
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6. Ahn, D.G., Ruvinsky, I., Oates, A.C., Silver, L.M. and Ho, R.K. 2000. TBX20, a new vertebrate T-box gene expressed in the cranial motor neurons and developing cardiovascular structures in zebrafish. Mech. Dev. 95: 253-258.

CHROMOSOMAL LOCATION

Genetic locus: TBX19 (human) mapping to 1q24.2.

SOURCE

TBX19 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TBX19 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.

Blocking peptide available for competition studies, sc-17894 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17894 X, 200 µg/0.1 ml.

APPLICATIONS

TBX19 (N-18) is recommended for detection of TBX19 of 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).

Suitable for use as control antibody for TBX19 siRNA (h): sc-38481, TBX19 shRNA Plasmid (h): sc-38481-SH and TBX19 shRNA (h) Lentiviral Particles: sc-38481-V.

TBX19 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

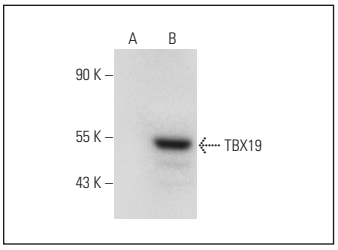
Molecular Weight of TBX19: 48 kDa.

Positive Controls: BX19 (h): 293T Lysate: sc-370174.

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



TBX19 (N-18): sc-17894. Western blot analysis of TBX19 expression in non-transfected: sc-117752 (**A**) and human TBX19 transfected: sc-370174 (**B**) 293T whole cell lysates.

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.