

# TBX19 (H-16): sc-22656

## 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

1. Law, D.J., et al. 1995. Identification, characterization, and localization to chromosome 17q21-22 of the human TBX2 homolog, member of a conserved developmental gene family. *Mamm. Genome* 6: 793-797.
2. Agulnik, S.I., et al. 1998. Cloning, mapping, and expression analysis of TBX15, a new member of the T-box gene family. *Genomics* 51: 68-75.
3. Dheen, T., et al. 1999. Zebrafish TBX-C functions during formation of mid-line structures. *Development* 126: 2703-2713.
4. He, M.I., et al. 1999. Transcription repression by *Xenopus* ET and its human ortholog TBX3, a gene involved in ulnar-mammary syndrome. *Proc. Natl. Acad. Sci. USA* 96: 10212-10217.

## CHROMOSOMAL LOCATION

Genetic locus: TBX19 (human) mapping to 1q24.2; Tbx19 (mouse) mapping to 1 H2.3.

## SOURCE

TBX19 (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TBX19 of mouse 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-22656 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-22656 X, 200 µg/0.1 ml.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

TBX19 (H-16) is recommended for detection of TBX19 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).

TBX19 (H-16) is also recommended for detection of TBX19 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TBX19 siRNA (h): sc-38481, TBX19 siRNA (m): sc-38482, TBX19 shRNA Plasmid (h): sc-38481-SH, TBX19 shRNA Plasmid (m): sc-38482-SH, TBX19 shRNA (h) Lentiviral Particles: sc-38481-V and TBX19 shRNA (m) Lentiviral Particles: sc-38482-V.

TBX19 (H-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

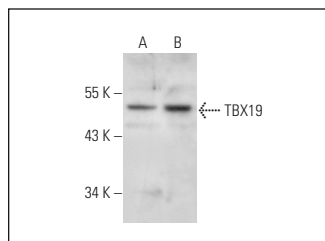
Molecular Weight of TBX19: 48 kDa.

Positive Controls: Hep G2 nuclear extract: sc-364819 or Hep G2 cell lysate: sc-2227.

## 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 (H-16): sc-22656. Western blot analysis of TBX19 expression in Hep G2 whole cell lysate (A) and Hep G2 tissue extract (B).

## RESEARCH USE

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