

TBX18 (N-20): sc-17867



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.

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: TBX18 (human) mapping to 6q14.3; Tbx18 (mouse) mapping to 9 E3.1.

SOURCE

TBX18 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TBX18 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-17867 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17867 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

TBX18 (N-20) is recommended for detection of TBX18 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TBX18 (N-20) is also recommended for detection of TBX18 in additional species, including equine, canine, bovine, porcine and avian.

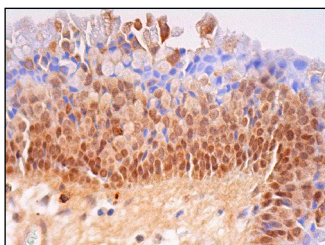
Suitable for use as control antibody for TBX18 siRNA (h): sc-38479, TBX18 siRNA (m): sc-38480, TBX18 shRNA Plasmid (h): sc-38479-SH, TBX18 shRNA Plasmid (m): sc-38480-SH, TBX18 shRNA (h) Lentiviral Particles: sc-38479-V and TBX18 shRNA (m) Lentiviral Particles: sc-38480-V.

TBX18 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TBX18: 65 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

DATA



TBX18 (N-20): sc-17867. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

1. Bax, N.A., et al. 2009. Platelet-derived growth factor is involved in the differentiation of second heart field-derived cardiac structures in chicken embryos. *Dev. Dyn.* 238: 2658-2669.

PROTOCOLS

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

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Try **TBX18 (G-6): sc-514486** or **TBX18 (CD-21): sc-130428**, our highly recommended monoclonal alternatives to TBX18 (N-20).