

# TBX4 (L-20): sc-17882

## 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: TBX4 (human) mapping to 17q23.2.

## SOURCE

TBX4 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TBX4 of human origin.

## PRODUCT

Each vial contains 100 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-17882 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17882 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.

## APPLICATIONS

TBX4 (L-20) is recommended for detection of TBX4 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), 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).

Suitable for use as control antibody for TBX4 siRNA (h): sc-38471, TBX4 shRNA Plasmid (h): sc-38471-SH and TBX4 shRNA (h) Lentiviral Particles: sc-38471-V.

TBX4 (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

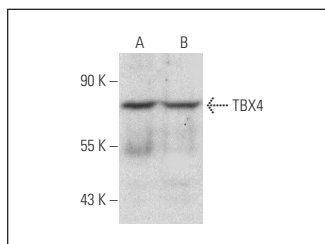
Molecular Weight of TBX4: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

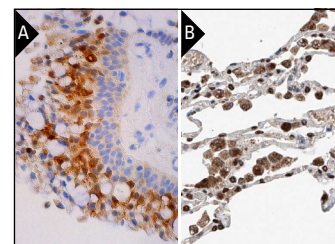
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



TBX4 (L-20): sc-17882. Western blot analysis of TBX4 expression in HeLa (A) and Hep G2 (B) whole cell lysates.



TBX4 (L-20): sc-17882. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing nuclear and cytoplasmic staining of macrophages at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

## RESEARCH USE

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

## PROTOCOLS

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

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Satisfaction  
Guaranteed

Try **TBX4 (G-4): sc-515196** or **TBX4 (F-12): sc-398903**, our highly recommended monoclonal alternatives to TBX4 (L-20).