

## TBX10 (T-23): sc-134058

### 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

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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.
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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: TBX10 (human) mapping to 11q13.2.

### SOURCE

TBX10 (T-23) is an affinity purified rabbit polyclonal antibody raised against synthetic TBX10 peptide of human origin.

### PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

### STORAGE

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

### APPLICATIONS

TBX10 (T-23) is recommended for detection of TBX10 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TBX10 siRNA (h): sc-38474, TBX10 shRNA Plasmid (h): sc-38474-SH and TBX10 shRNA (h) Lentiviral Particles: sc-38474-V.

Positive Controls: human fetal muscle whole cell lysate.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

### 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.