

TBX5 (H-70): sc-48782

BACKGROUND

Members of the T-box (Tbx) gene family share a conserved domain that codes for the T-box, a sequence involved in DNA-binding and protein dimerization. The Tbx gene family is largely conserved throughout metazoan evolution, and is implicated in a variety of developmental processes ranging from the formation of germ layers to the organizational patterning of the central nervous system. Embryonic expression of TBX5 has been found in the human retina. TBX5 as well as TBX20 are required for and have non-redundant functions in early heart development. The genes encoding human TBX5 and TBX1 are mutated in cardiac congenital anomaly syndromes. Specifically, mutations in the TBX5 gene have been identified in patients with Holt-Oram syndrome, an autosomal dominant heart-hand syndrome characterized by congenital heart disease and upper limb deformity.

CHROMOSOMAL LOCATION

Genetic locus: TBX5 (human) mapping to 12q24.21; Tbx5 (mouse) mapping to 5 F.

SOURCE

TBX5 (H-70) is a rabbit polyclonal antibody raised against amino acids 258-327 mapping within an internal region of TBX5 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-48782 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.

APPLICATIONS

TBX5 (H-70) is recommended for detection of TBX5 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).

TBX5 (H-70) is also recommended for detection of TBX5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TBX5 siRNA (h): sc-37020, TBX5 siRNA (m): sc-37021, TBX5 shRNA Plasmid (h): sc-37020-SH, TBX5 shRNA Plasmid (m): sc-37021-SH, TBX5 shRNA (h) Lentiviral Particles: sc-37020-V and TBX5 shRNA (m) Lentiviral Particles: sc-37021-V.

TBX5 (H-70) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

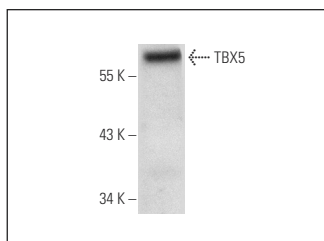
Molecular Weight of TBX5: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or KNRK whole cell lysate: sc-2214.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TBX5 (H-70): sc-48782. Western blot analysis of TBX5 expression in KNRK whole cell lysate.

SELECT PRODUCT CITATIONS

1. Moraveji, S.F., et al. 2012. Inhibition of glycogen synthase kinase-3 promotes efficient derivation of pluripotent stem cells from neonatal mouse testis. *Hum. Reprod.* 27: 2312-2324.

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.



Try **TBX5 (A-6): sc-515536** or **TBX5 (A-4): sc-376952**, our highly recommended monoclonal alternatives to TBX5 (H-70).