

Sox-10 (H-2): sc-271163

BACKGROUND

Sox genes comprise a family of genes that are related to the mammalian sex determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. Sox genes encode putative transcriptional regulators implicated in the decision of cell fates during development and the control of diverse developmental processes. The highly complex group of Sox genes cluster at least 40 different loci that rapidly diverged in various animal lineages. At present, 30 Sox genes have been identified. Members of this family have been shown to be conserved during evolution and to play key roles during animal development. Some are involved in human diseases, including sex reversal.

CHROMOSOMAL LOCATION

Genetic locus: SOX10 (human) mapping to 22q13.1; Sox10 (mouse) mapping to 15 E1.

SOURCE

Sox-10 (H-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 396-422 near the C-terminus of Sox-10 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain 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-271163 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-271163 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

Sox-10 (H-2) is recommended for detection of Sox-10 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Sox-10 (H-2) is also recommended for detection of Sox-10 in additional species, including canine.

Suitable for use as control antibody for Sox-10 siRNA (h): sc-38420, Sox-10 siRNA (m): sc-38421, Sox-10 shRNA Plasmid (h): sc-38420-SH, Sox-10 shRNA Plasmid (m): sc-38421-SH, Sox-10 shRNA (h) Lentiviral Particles: sc-38420-V and Sox-10 shRNA (m) Lentiviral Particles: sc-38421-V.

Sox-10 (H-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

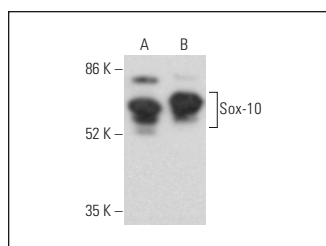
Molecular Weight of Sox-10: 58 kDa.

Positive Controls: SK-MEL-24 whole cell lysate: sc-364259, C6 whole cell lysate: sc-364373 or Sox-10 (h3): 293T Lysate: sc-176025.

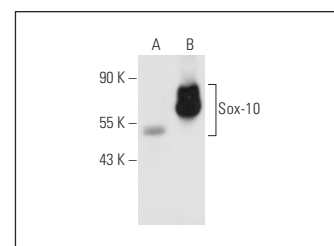
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Sox-10 (H-2): sc-271163. Western blot analysis of Sox-10 expression in SK-MEL-24 (A) and C6 (B) whole cell lysates.



Sox-10 (H-2): sc-271163. Western blot analysis of Sox-10 expression in non-transfected: sc-117752 (A) and human Sox-10 transfected: sc-176025 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Gomez, G.A., et al. 2019. Human neural crest induction by temporal modulation of WNT activation. *Dev. Biol.* 449: 99-106.
- Hackland, J.O.S., et al. 2019. Fully defined and xeno-free induction of hPSCs into neural crest using top-down inhibition of BMP signaling. *Methods Mol. Biol.* 1976: 49-54.
- Gomez, G.A., et al. 2019. WNT/β-catenin modulates the axial identity of ES derived human neural crest. *Development* 146: dev175604.
- Xu, K., et al. 2021. Tenascin-C regulates migration of SOX10 tendon stem cells via integrin-α9 for promoting patellar tendon remodeling. *Biofactors* 47: 768-777.

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 for detailed protocols and support products.