

# Sox-10 (G-11): sc-374170

## 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 (G-11) is a mouse monoclonal antibody raised against amino acids 311-450 mapping near the C-terminus of Sox-10 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> 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-374170 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

Sox-10 (G-11) 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), 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 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 (h) Lentiviral Particles: sc-38421-V.

Sox-10 (G-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

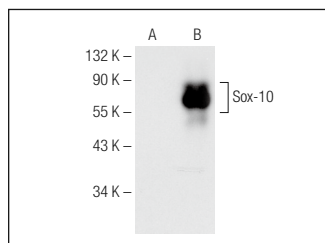
Molecular Weight of Sox-10: 58 kDa.

Positive Controls: Sox-10 (h): 293T Lysate: sc-176025, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

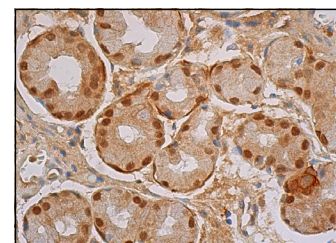
## RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Sox-10 (G-11): sc-374170. 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.



Sox-10 (G-11): sc-374170. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing nuclear and cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Casalenovo, M.B., et al. 2019. Myelination key factor krox-20 is downregulated in Schwann cells and murine sciatic nerves infected by *Mycobacterium leprae*. Int. J. Exp. Pathol. 100: 83-93.
2. Lin, T., et al. 2020. Phenotypic similarities in pigs with SOX10c.321dupC and SOX10c.325A>T mutations implied the correlation of SOX10 haploinsufficiency with Waardenburg syndrome. J. Genet. Genomics 47: 770-780.
3. Liang, L., et al. 2021. Melatonin pretreatment alleviates the long-term synaptic toxicity and dysmyelination induced by neonatal sevoflurane exposure via MT1 receptor-mediated Wnt signaling modulation. J. Pineal Res. 71: e12771.
4. Wang, R., et al. 2022. Laparoscopic excision for intrapelvic schwannoma of the sciatic nerve: a case report. Exp. Ther. Med. 25: 45.

## RESEARCH USE

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



See **Sox-10 (A-2): sc-365692** for Sox-10 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.