SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-10 (N-20): sc-17342

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 a minimum of 40 different loci that rapidly diverged in various animal lineages. At present 30 Sox genes have been identified, and 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 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Sox-10 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-17342 X, 100 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17342 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sox-10 (N-20) is recommended for detection of Sox-10 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), 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).

Sox-10 (N-20) is also recommended for detection of Sox-10 in additional species, including equine, canine, bovine and porcine.

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

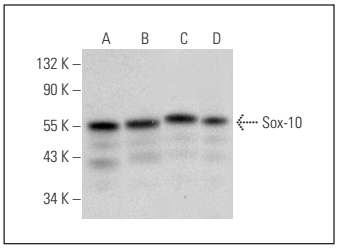
Molecular Weight of Sox-10: 58 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, Sox-10 (m): 293T Lysate: sc-123716 or C6 whole cell lysate: sc-364373.

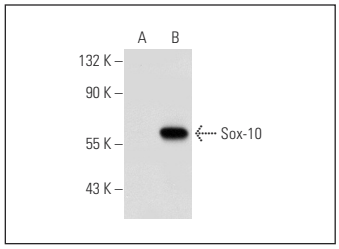
STORAGE

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

DATA



Sox-10 (N-20): sc-17342. Western blot analysis of Sox-10 expression in A-375 (**A**), SK-MEL-28 (**B**), C6 (**C**) and B16-F0 (**D**) whole cell lysates.



Sox-10 (N-20): sc-17342. Western blot analysis of Sox-10 expression in non-transfected: sc-117752 (**A**) and mouse Sox-10 transfected: sc-123716 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Commo, S., et al. 2004. Absence of TRP2 in melanogenic melanocytes of human hair. Pigment Cell Res. 17: 488-497.
2. Gammill, L.S. and Roffers-Agarwal, J. 2010. Division of labor during trunk neural crest development. Dev. Biol. 344: 555-565.
3. Heanue, T.A., et al. 2011. Prospective identification and isolation of enteric nervous system progenitors using Sox2. Stem Cells 29: 128-140.
4. Wang, X., et al. 2011. Analysis of the sacral neural crest cell contribution to the hindgut enteric nervous system in the mouse embryo. Gastroenterology 141: 992-1002.
5. Chaoui, A., et al. 2011. Identification and functional analysis of SOX10 missense mutations in different subtypes of Waardenburg syndrome. Hum. Mutat. 32: 1436-1449.
6. Domínguez-Frutos, E., et al. 2011. N-myc controls proliferation, morphogenesis, and patterning of the inner ear. J. Neurosci. 31: 7178-7189.
7. Guo, F., et al. 2011. Macroglial plasticity and the origins of reactive astroglia in experimental autoimmune encephalomyelitis. J. Neurosci. 31: 11914-11928.
8. Shakhova, O., et al. 2012. Sox10 promotes the formation and maintenance of giant congenital naevi and melanoma. Nat. Cell Biol. 14: 882-890.

RESEARCH USE

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