

Sox-11 (H-290): sc-20096

BACKGROUND

The Sox family are comprised of members that are related to the mammalian sex determining gene SRY. The Sox family of 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 conserved during evolution and play key roles during animal development. Some are involved in human diseases, including sex reversal. Sox-11 (SRY (sex determining region Y)-box 11) is a 441 amino acid nuclear protein expressed mainly in the nervous system. Containing an HMG box DNA-binding domain, Sox-11 may play a critical role in the developing nervous system.

CHROMOSOMAL LOCATION

Genetic locus: SOX11 (human) mapping to 2p25.2; Sox11 (mouse) mapping to 12 A2.

SOURCE

Sox-11 (H-290) is a rabbit polyclonal antibody raised against amino acids 121-410 of Sox-11 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-20096 X, 200 µg/0.1 ml.

APPLICATIONS

Sox-11 (H-290) is recommended for detection of Sox-11 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-11 (H-290) is also recommended for detection of Sox-11 in additional species, including porcine.

Suitable for use as control antibody for Sox-11 siRNA (h): sc-38422, Sox-11 siRNA (m): sc-38423, Sox-11 shRNA Plasmid (h): sc-38422-SH, Sox-11 shRNA Plasmid (m): sc-38423-SH, Sox-11 shRNA (h) Lentiviral Particles: sc-38422-V and Sox-11 shRNA (m) Lentiviral Particles: sc-38423-V.

Sox-11 (H-290) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

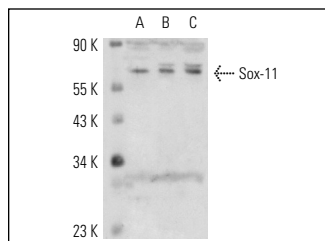
Molecular Weight of Sox-11: 47 kDa.

Positive Controls: IMR-32 nuclear extract: sc-2148, Y79 nuclear extract: sc-2126 and SK-N-MC nuclear extract: sc-2154.

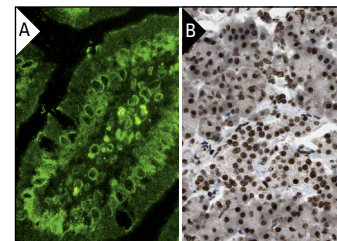
STORAGE

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

DATA



Sox-11 (H-290): sc-20096. Western blot analysis of Sox-11 protein expression in Y79 (A), SK-N-MC (B) and IMR-32 (C) nuclear extracts.



Sox-11 (H-290): sc-20096. Immunofluorescence staining of normal mouse intestine frozen section showing perinuclear staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing nuclear staining of exocrine pancreas and islet cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

- Masui, S., et al. 2007. Pluripotency governed by Sox-2 via regulation of OCT3/4 expression in mouse embryonic stem cells. *Nat. Cell Biol.* 9: 625-635.
- Esibizione, D., et al. 2008. Candidate EDA targets revealed by expression profiling of primary keratinocytes from Tabby mutant mice. *Gene* 427: 42-46.
- Jankowski, M.P., et al. 2009. Sox-11 transcription factor modulates peripheral nerve regeneration in adult mice. *Brain Res.* 1256: 43-54.
- Cao, X., et al. 2011. The expression of SOX11, cyclin D1, cyclin D2, and cyclin D3 in B-cell lymphocytic proliferative diseases. *Med. Oncol.* 29: 1190-1196.
- Parakalan, R., et al. 2012. Transcriptome analysis of amoeboid and ramified microglia isolated from the corpus callosum of rat brain. *BMC Neurosci.* 13: 64.
- Murugan, S., et al. 2012. WT1 and Sox11 regulate synergistically the promoter of the Wnt4 gene that encodes a critical signal for nephrogenesis. *Exp. Cell Res.* 318: 1134-1145.

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.