

# Sox-11 (C-20): sc-17347

## 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.

## REFERENCES

- Laudet, V., et al. 1993. Ancestry and diversity of the HMG box superfamily. *Nucleic Acids Res.* 21: 2493-2501.
- Kuhlbrodt, K., et al. 1998. Sox-10, a novel transcriptional modulator in glial cells. *J. Neurosci.* 18: 237-250.
- Arsic, N., et al. 1998. Characterisation and mapping of the human Sox-14 gene. *Cytogenet. Cell Genet.* 83: 139-146.
- Osaki, E., et al. 1999. Identification of a novel SRY-related gene and its germ cell-specific expression. *Nucleic Acids Res.* 27: 2503-2510.

## CHROMOSOMAL LOCATION

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

## SOURCE

Sox-11 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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.

Blocking peptide available for competition studies, sc-17347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17347 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.

## RESEARCH USE

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

## APPLICATIONS

Sox-11 (C-20) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

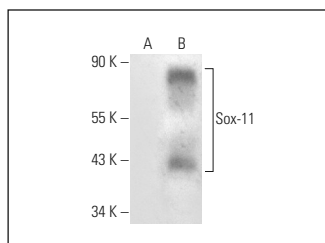
Molecular Weight of Sox-11: 47 kDa.

Positive Controls: Sox-11 (h): 293T Lysate: sc-176016, Y79 cell lysate: sc-2240 or SK-N-MC nuclear extract: sc-2154.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Sox-11 (C-20): sc-17347. Western blot analysis of Sox-11 expression in non-transfected: sc-117752 (A) and human Sox-11 transfected: sc-176016 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Haslinger, A., et al. 2009. Expression of Sox-11 in adult neurogenic niches suggests a stage-specific role in adult neurogenesis. *Eur. J. Neurosci.* 29: 2103-2114.
- Jankowski, M.P., et al. 2009. Sox11 transcription factor modulates peripheral nerve regeneration in adult mice. *Brain Res.* 1256: 43-54.