

Sox-11 (B-11): sc-518104

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

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- Kuhlbrodt, K., Herbarth, B., Sock, E., Hermans-Borgmeyer, I. and Wegner, M. 1998. Sox10, a novel transcriptional modulator in glial cells. *J. Neurosci.* 18: 237-250.
- Arsic, N., Rajic, T., Stanojic, S., Goodfellow, P.N. and Stevanovic, M. 1998. Characterisation and mapping of the human SOX14 gene. *Cytogenet. Cell Genet.* 83: 139-146.
- Osaki, E., Nishina, Y., Inazawa, J., Copeland, N.G., Gilbert, D.J., Jenkins, N.A., Ohsugi, M., Tezuka, T., Yoshida, M. and Semba, K. 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 (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 4-27 near the N-terminus of Sox-11 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Sox-11 (B-11) is available conjugated to agarose (sc-518104 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518104 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518104 PE), fluorescein (sc-518104 FITC), Alexa Fluor® 488 (sc-518104 AF488), Alexa Fluor® 546 (sc-518104 AF546), Alexa Fluor® 594 (sc-518104 AF594) or Alexa Fluor® 647 (sc-518104 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518104 AF680) or Alexa Fluor® 790 (sc-518104 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Sox-11 (B-11) is recommended for detection of Sox-11 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).

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.

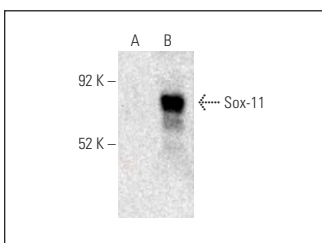
Molecular Weight of Sox-11: 60 kDa.

Positive Controls: Sox-11 (m): 293T Lysate: sc-123719.

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.

DATA



Sox-11 (B-11): sc-518104. Western blot analysis of Sox-11 expression in non-transfected: sc-117752 (A) and mouse Sox-11 transfected: sc-123719 (B) 293T whole cell lysates. Detection reagent used: m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.