

Sox-18 (Y-20): sc-17359

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. Sox-18 is a 384 amino acid nuclear protein that contains one HMG box DNA-binding domain and belongs to the Sox family of transcriptional regulators.

REFERENCES

- Dunn, T.L., et al. 1995. Sequence and expression of Sox-18 encoding a new HMG-box transcription factor. *Gene* 161: 223-225.
- Azuma, T., et al. 2000. cDNA cloning, tissue expression, and chromosome mapping of human homolog of SOX18. *J. Hum. Genet.* 45: 192-195.
- Hosking, B.M., et al. 2001. SOX18 directly interacts with MEF2C in endothelial cells. *Biochem. Biophys. Res. Commun.* 287: 493-500.
- Wilson, M. and Koopman, P. 2002. Matching SOX: partner proteins and co-factors of the SOX family of transcriptional regulators. *Curr. Opin. Genet. Dev.* 12: 441-446.
- Schepers, G.E., et al. 2002. Twenty pairs of sox: extent, homology, and nomenclature of the mouse and human sox transcription factor gene families. *Dev. Cell* 3: 167-170.

CHROMOSOMAL LOCATION

Genetic locus: SOX18 (human) mapping to 20q13.33; Sox18 (mouse) mapping to 2 H4.

SOURCE

Sox-18 (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sox-18 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-17359 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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-18 (Y-20) is recommended for detection of Sox-18 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-18 siRNA (h): sc-36527, Sox-18 siRNA (m): sc-36528, Sox-18 shRNA Plasmid (h): sc-36527-SH, Sox-18 shRNA Plasmid (m): sc-36528-SH, Sox-18 shRNA (h) Lentiviral Particles: sc-36527-V and Sox-18 shRNA (m) Lentiviral Particles: sc-36528-V.

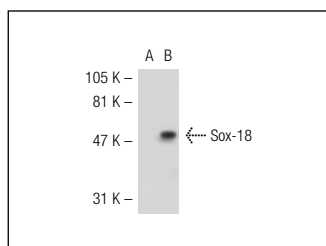
Molecular Weight of Sox-18: 45 kDa.

Positive Controls: mouse brain extract: sc-2253, L6 whole cell lysate: sc-364196 or Sox-18 (h): 293T Lysate: sc-111552.

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-18 (Y-20): sc-17359. Western blot analysis of Sox-18 expression in non-transfected: sc-117752 (A) and human Sox-18 transfected: sc-111552 (B) 293T whole cell lysates.

PROTOCOLS

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

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Try **Sox-18 (D-8): sc-166025** or **Sox-18 (E-11): sc-376166**, our highly recommended monoclonal alternatives to Sox-18 (Y-20).