

## Sox-6 (C-20): sc-17332

### 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.

### 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: SOX6 (human) mapping to 11p15.2; Sox6 (mouse) mapping to 7 F1.

### SOURCE

Sox-6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Sox-6 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17332 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17332 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

### APPLICATIONS

Sox-6 (C-20) is recommended for detection of Sox-6 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).

Sox-6 (C-20) is also recommended for detection of Sox-6 in additional species, including equine, canine, bovine, porcine and avian.

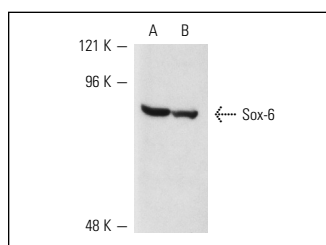
Suitable for use as control antibody for Sox-6 siRNA (h): sc-36531, Sox-6 siRNA (m): sc-36532, Sox-6 shRNA Plasmid (h): sc-36531-SH, Sox-6 shRNA Plasmid (m): sc-36532-SH, Sox-6 shRNA (h) Lentiviral Particles: sc-36531-V and Sox-6 shRNA (m) Lentiviral Particles: sc-36532-V.

Sox-6 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sox-6: 90 kDa.

Positive Controls: A-673 cell lysate: sc-2414 or SJRH30 cell lysate: sc-2287.

### DATA



Sox-6 (C-20): sc-17332. Western blot analysis of Sox-6 expression in A-673 (A) and SJRH30 (B) whole cell lysates.

### SELECT PRODUCT CITATIONS

- Iguchi, H., et al. 2005. SOX6 attenuates glucose-stimulated insulin secretion by repressing PDX1 transcriptional activity and is down-regulated in hyperinsulinemic obese mice. *J. Biol. Chem.* 280: 37669-37680.
- Yi, Z., et al. 2006. Sox6 directly silences  $\epsilon$  globin expression in definitive erythropoiesis. *PLoS Genet.* 2: e14.
- Cantu, C., et al. 2011. A highly conserved SOX6 double binding site mediates SOX6 gene downregulation in erythroid cells. *Nucleic Acids Res.* 39: 486-501.



Try **Sox-6 (A-4): sc-393314**, our highly recommended monoclonal alternative to Sox-6 (C-20).