

Sox-5 (H-90): sc-20091

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.

CHROMOSOMAL LOCATION

Genetic locus: SOX5 (human) mapping to 12p12.1; Sox5 (mouse) mapping to 6 G3.

SOURCE

Sox-5 (H-90) is a rabbit polyclonal antibody raised against amino acids 51-140 mapping near the N-terminus of Sox-5 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-20091 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.

APPLICATIONS

Sox-5 (H-90) is recommended for detection of Sox-5 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-5 (H-90) is also recommended for detection of Sox-5 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Sox-5 siRNA (h): sc-38414, Sox-5 siRNA (m): sc-38415, Sox-5 shRNA Plasmid (h): sc-38414-SH, Sox-5 shRNA Plasmid (m): sc-38415-SH, Sox-5 shRNA (h) Lentiviral Particles: sc-38414-V and Sox-5 shRNA (m) Lentiviral Particles: sc-38415-V.

Sox-5 (H-90) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

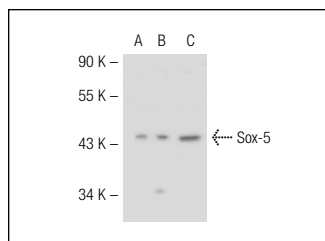
Molecular Weight of Sox-5 isoforms: 84/82/71/41 kDa.

Positive Controls: Sox-5 (h): 293T Lysate: sc-114417 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Sox-5 (H-90): sc-20091. Western blot analysis of Sox-5 expression in non-transfected 293T: sc-117752 (A), human Sox-5 transfected 293T: sc-114417 (B) and HeLa (C) 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.
- Chu, F.T., et al. 2008. Mandibular functional positioning only in vertical dimension contributes to condylar adaptation evidenced by concomitant expressions of L-Sox5 and type II collagen. *Arch. Oral Biol.* 53: 567-574.
- Xu, J., et al. 2012. MiR-194 regulates chondrogenic differentiation of human adipose-derived stem cells by targeting Sox5. *PLoS One* 7: e31861.

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.



Try **Sox-5 (4H8): sc-293215**, our highly recommended monoclonal alternative to Sox-5 (H-90).