

# Sox-9 (P-20): sc-17340

## 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: SOX9 (human) mapping to 17q24.3; Sox9 (mouse) mapping to 11 E2.

## SOURCE

Sox-9 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sox-9 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-17340 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17340 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Sox-9 (P-20) is recommended for detection of Sox-9 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-9 (P-20) is also recommended for detection of Sox-9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Sox-9 siRNA (h): sc-36533, Sox-9 siRNA (m): sc-36534, Sox-9 shRNA Plasmid (h): sc-36533-SH, Sox-9 shRNA Plasmid (m): sc-36534-SH, Sox-9 shRNA (h) Lentiviral Particles: sc-36533-V and Sox-9 shRNA (m) Lentiviral Particles: sc-36534-V.

Sox-9 (P-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sox-9: 65 kDa.

Positive Controls: Sox-9 (h): 293T Lysate: sc-116634, C3H/10T1/2 cell lysate: sc-3801 or SW480 nuclear extract: sc-2155.

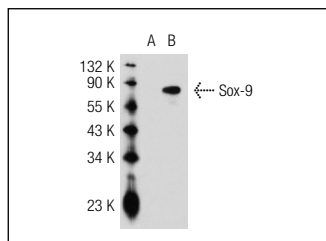
## RESEARCH USE

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

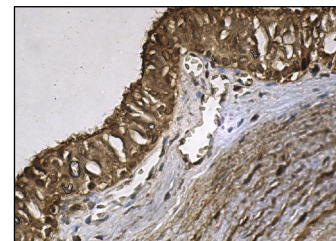
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



Sox-9 (P-20): sc-17340. Western blot analysis of Sox-9 expression in non-transfected: sc-117752 (A) and human Sox-9 transfected: sc-116634 (B) 293T whole cell lysates.



Sox-9 (P-20): sc-17340. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testes tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts.

## SELECT PRODUCT CITATIONS

- Saint-Germain, N., et al. 2004. Specification of the otic placode depends on Sox-9 function in *Xenopus*. *Development* 131: 1755-1763.
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- Neven, E., et al. 2010. Chondrocyte rather than osteoblast conversion of vascular cells underlies medial calcification in uremic rats. *Arterioscler. Thromb. Vasc. Biol.* 30: 1741-1750.
- Voigt, M., et al. 2010. Fibroblast growth factor (FGF)-23 and fetuin-A in calcified carotid atheroma. *Histopathology* 56: 775-788.
- Behr, B., et al. 2010. Differential activation of canonical Wnt signaling determines cranial sutures fate: a novel mechanism for sagittal suture craniosynostosis. *Dev. Biol.* 344: 922-940.
- Toribio, R.E., et al. 2010. The midregion, nuclear localization sequence, and C terminus of PTHrP regulate skeletal development, hematopoiesis, and survival in mice. *FASEB J.* 24: 1947-1957.

## PROTOCOLS

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



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Try **Sox-9 (E-9): sc-166505**, our highly recommended monoclonal alternative to Sox-9 (P-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Sox-9 (E-9): sc-166505**.