

Sox-8 (H-7): sc-374446

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. Sox10, a novel transcriptional modulator in glial cells. *J. Neurosci.* 18: 237-250.
- Arsic, N., et al. 1998. Characterisation and mapping of the human Sox14 gene. *Cytogenet. Cell Genet.* 83: 139-146.

CHROMOSOMAL LOCATION

Genetic locus: SOX8 (human) mapping to 16p13.3; Sox8 (mouse) mapping to 17 A3.3.

SOURCE

Sox-8 (H-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 235-271 within an internal region of Sox-8 of human 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374446 X, 200 µg/0.1 ml.

Sox-8 (H-7) is available conjugated to agarose (sc-374446 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374446 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374446 PE), fluorescein (sc-374446 FITC), Alexa Fluor[®] 488 (sc-374446 AF488), Alexa Fluor[®] 546 (sc-374446 AF546), Alexa Fluor[®] 594 (sc-374446 AF594) or Alexa Fluor[®] 647 (sc-374446 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374446 AF680) or Alexa Fluor[®] 790 (sc-374446 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374446 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

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

APPLICATIONS

Sox-8 (H-7) is recommended for detection of Sox-8 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).

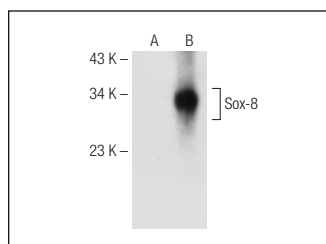
Suitable for use as control antibody for Sox-8 siRNA (h): sc-38418, Sox-8 siRNA (m): sc-38419, Sox-8 shRNA Plasmid (h): sc-38418-SH, Sox-8 shRNA Plasmid (m): sc-38419-SH, Sox-8 shRNA (h) Lentiviral Particles: sc-38418-V and Sox-8 shRNA (m) Lentiviral Particles: sc-38419-V.

Sox-8 (H-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

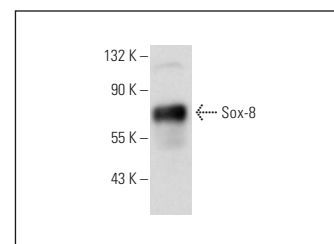
Molecular Weight of Sox-8: 56 kDa.

Positive Controls: Sox-8 (m): 293T Lysate: sc-123720, Neuro-2A whole cell lysate: sc-364185 or IMR-32 nuclear extract: sc-2148.

DATA



Sox-8 (H-7): sc-374446. Western blot analysis of Sox-8 expression in non-transfected: sc-117752 (A) and mouse Sox-8 transfected: sc-123720 (B) 293T whole cell lysates.



Sox-8 (H-7): sc-374446. Western blot analysis of Sox-8 expression in Neuro-2A whole cell lysate.

SELECT PRODUCT CITATIONS

- Gao, L., et al. 2015. Ameliorative effects of baicalein in MPTP-induced mouse model of Parkinson's disease: a microarray study. *Pharmacol. Biochem. Behav.* 133: 155-163.
- Xie, S.L., et al. 2018. Sox-8 regulates cancer stem-like properties and cisplatin-induced EMT in tongue squamous cell carcinoma by acting on the Wnt/β-catenin pathway. *Int. J. Cancer* 142: 1252-1265.
- Gayen, M., et al. 2022. The CX3CL1 intracellular domain exhibits neuro-protection via Insulin receptor/Insulin like growth factor receptor signaling. *J. Biol. Chem.* 298: 102532.
- Gao, F., et al. 2022. Decoding the IGF1 signaling gene regulatory network behind alveologenesis from a mouse model of bronchopulmonary dysplasia. *Elife* 11: e77522.

STORAGE

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