

Sox-13 (B-5): sc-515107

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.

REFERENCES

1. Laudet, V., et al. 1993. Ancestry and diversity of the HMG box superfamily. *Nucleic Acids Res.* 21: 2493-2501.
2. Kuhlbrodt, K., et al. 1998. Sox-10, a novel transcriptional modulator in glial cells. *J. Neurosci.* 18: 237-250.
3. Arsic, N., et al. 1998. Characterisation and mapping of the human SOX14 gene. *Cytogenet. Cell Genet.* 83: 139-146.
4. Osaki, E., et al. 1999. Identification of a novel Sry-related gene and its germ cell-specific expression. *Nucleic Acids Res.* 27: 2503-2510.
5. Sasai, Y. 2001. Roles of Sox factors in neural determination: conserved signaling in evolution? *Int. J. Dev. Biol.* 45: 321-326.

CHROMOSOMAL LOCATION

Genetic locus: SOX13 (human) mapping to 1q32.1; Sox13 (mouse) mapping to 1 E4.

SOURCE

Sox-13 (B-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 312-339 within an internal region of Sox-13 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} 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-515107 X, 200 µg/0.1 ml.

Sox-13 (B-5) is available conjugated to agarose (sc-515107 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515107 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515107 PE), fluorescein (sc-515107 FITC), Alexa Fluor® 488 (sc-515107 AF488), Alexa Fluor® 546 (sc-515107 AF546), Alexa Fluor® 594 (sc-515107 AF594) or Alexa Fluor® 647 (sc-515107 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515107 AF680) or Alexa Fluor® 790 (sc-515107 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515107 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Sox-13 (B-5) is recommended for detection of Sox-13 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-13 siRNA (h): sc-38424, Sox-13 siRNA (m): sc-38425, Sox-13 shRNA Plasmid (h): sc-38424-SH, Sox-13 shRNA Plasmid (m): sc-38425-SH, Sox-13 shRNA (h) Lentiviral Particles: sc-38424-V and Sox-13 shRNA (m) Lentiviral Particles: sc-38425-V.

Sox-13 (B-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

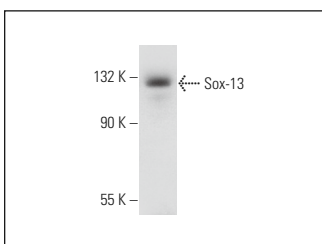
Molecular Weight of Sox-13: 111 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or KNRK whole cell lysate: sc-2214.

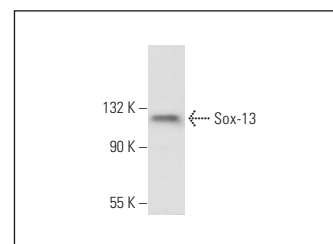
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Sox-13 (B-5): sc-515107. Western blot analysis of Sox-13 expression in Hep G2 whole cell lysate.



Sox-13 (B-5): sc-515107. Western blot analysis of Sox-13 expression in KNRK whole cell lysate.

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.

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