

Sox-15 (C-7): sc-166964

BACKGROUND

Sox-15 (SRY (sex determining region Y)-box 20, SRY-box 15, SOX26, SOX27) encodes a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of the cell fate. Sox-15 may act as a transcriptional regulator after forming a protein complex with other proteins. Sox-15 is widely expressed in fetal and adult tissues with highest level found in fetal spinal cord, adult brain and adult testis. Sox family transcription factors influence cell differentiation, development, and sex determination. Sox-15 contains a unique DNA binding domain known as the high mobility group (HMG) box that is related to that of the testis determining gene SRY. The highly complex group of Sox genes cluster at a minimum of 40 different loci that rapidly diverged in various animal lineages. Several 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.

REFERENCES

- Laudet, V., et al. 1993. Ancestry and diversity of the HMG box superfamily. *Nucleic Acids Res.* 21: 2493-2501.
- Meyer, J., et al. 1996. SOX20, a new member of the SOX gene family, is located on chromosome 17p13. *Cytogenet. Cell Genet.* 72: 246-249.
- Vujic, M., et al. 1998. cDNA characterization and high resolution mapping of the human SOX20 gene. *Mamm. Genome* 9: 1059-1061.
- Hiraoka, Y., et al. 1998. Isolation and expression of a human SRY-related cDNA hSOX20. *Biochim. Biophys. Acta* 1396: 132-137.
- Kuhlbrodt, K., et al. 1998. Sox10, a novel transcriptional modulator in glial cells. *J. Neurosci.* 18: 237-250.

CHROMOSOMAL LOCATION

Genetic locus: SOX15 (human) mapping to 17p13.1.

SOURCE

Sox-15 (C-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-40 at the N-terminus of Sox-15 of human origin.

PRODUCT

Each vial contains 200 µg IgM 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-166964 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-166964 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

Sox-15 (C-7) is recommended for detection of Sox-15 of 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-15 siRNA (h): sc-38431, Sox-15 shRNA Plasmid (h): sc-38431-SH and Sox-15 shRNA (h) Lentiviral Particles: sc-38431-V.

Sox-15 (C-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

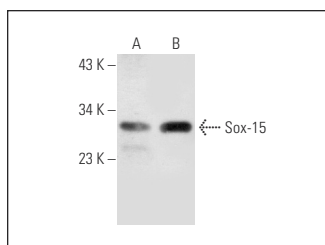
Molecular Weight of Sox-15: 25 kDa.

Positive Controls: Sox-15 (h): 293 Lysate: sc-110784, NTERA-2 cl.D1 whole cell lysate: sc-364181 or HeLa whole cell lysate: sc-2200.

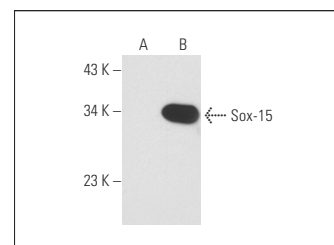
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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-15 (C-7): sc-166964. Western blot analysis of Sox-15 expression in human PBL (A) and HeLa (B) whole cell lysates.



Sox-15 (C-7): sc-166964. Western blot analysis of Sox-15 expression in non-transfected: sc-110760 (A) and human Sox-15 transfected: sc-110784 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Zou, Y., et al. 2020. Illuminating NAD⁺ metabolism in live cells and *in vivo* using a genetically encoded fluorescent sensor. *Dev. Cell* 53: 240-252.e7.
- Ding, Y., et al. 2022. SOX15 transcriptionally increases the function of AOC1 to modulate ferroptosis and progression in prostate cancer. *Cell Death Dis.* 13: 673.

RESEARCH USE

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