SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-6 (H-95): sc-20092

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Sox10, a novel transcriptional modulator in glial cells. J. Neurosci. 18: 237-250.

CHROMOSOMAL LOCATION

Genetic locus: SOX6 (human) mapping to 11p15.2; Sox6 (mouse) mapping to 7 F1.

SOURCE

Sox-6 (H-95) is a rabbit polyclonal antibody raised against amino acids 506-600 of Sox-6 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-20092 X, 200 µg/0.1 ml.

APPLICATIONS

Sox-6 (H-95) is recommended for detection of Sox-6 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), immunohistochemistry (including paraffin-embedded sections) (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-6 siRNA (h): sc-36531, Sox-6 siRNA (m): sc-36532, Sox-6 shRNA Plasmid (h): sc-36531-SH, Sox-6 shRNA Plasmid (m): sc-36532-SH, Sox-6 shRNA (h) Lentiviral Particles: sc-36531-V and Sox-6 shRNA (m) Lentiviral Particles: sc-36532-V.

Sox-6 (H-95) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

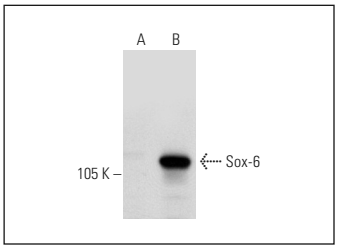
Molecular Weight of Sox-6: 91.8 kDa.

Positive Controls: A673 cell lysate: sc-2414, Sox-6 (h3): 293T Lysate: sc-129816 or SJRH30 cell lysate: sc-2287.

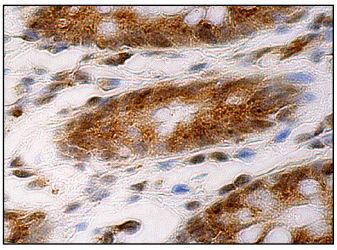
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Sox-6 (H-95): sc-20092. Western blot analysis of Sox-6 expression in non-transfected: sc-117752 (**A**) and human Sox-6 transfected: sc-129816 (**B**) 293T whole cell lysates.



Sox-6 (H-95): sc-20092. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Carver, K.C., et al. 2010. Prolactin enhances Insulin-like growth factor I receptor phosphorylation by decreasing its association with the tyrosine phosphatase SHP-2 in MCF-7 breast cancer cells. J. Biol. Chem. 285: 8003-8012.
2. Aza-Carmona, M., et al. 2011. SHOX interacts with the chondrogenic transcription factors SOX5 and SOX6 to activate the aggrecan enhancer. Hum. Mol. Genet. 20: 1547-1559.

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.