SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-17 (V-20): sc-17356

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 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

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 Sox-14 gene. Cytogenet. Cell Genet. 83: 139-146.
4. Osaki, E., et al. 1999. Identifica-tion of a novel SRY-related gene and its germ cell-specific expression. Nucleic Acids Res. 27: 2503-2510.

CHROMOSOMAL LOCATION

Genetic locus: SOX17 (human) mapping to 8q11.23; Sox17 (mouse) mapping to 1 A1.

SOURCE

Sox-17 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sox-17 of mouse 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-17356 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17356 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Sox-17 (V-20) is recommended for detection of Sox-17 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-17 (V-20) is also recommended for detection of Sox-17 in additional species, including canine.

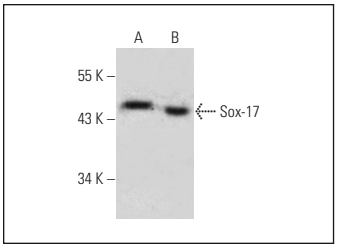
Suitable for use as control antibody for Sox-17 siRNA (h): sc-38429, Sox-17 siRNA (m): sc-38430, Sox-17 shRNA Plasmid (h): sc-38429-SH, Sox-17 shRNA Plasmid (m): sc-38430-SH, Sox-17 shRNA (h) Lentiviral Particles: sc-38429-V and Sox-17 shRNA (m) Lentiviral Particles: sc-38430-V.

Sox-17 (V-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sox-17: 45 kDa.

Positive Controls: mouse testis extract: sc-2405, KNRK nuclear extract: sc-2141 or C6 whole cell lysate: sc-364373.

DATA



Sox-17 (V-20): sc-17356. Western blot analysis of Sox-17 expression in KNRK nuclear extract (**A**) and C6 whole cell lysate (**B**).

SELECT PRODUCT CITATIONS

1. Yasunaga, M., et al. 2005. Induction and monitoring of definitive and visceral endoderm differentiation of mouse ES cells. Nat. Biotechnol. 23: 1542-1550.
2. Haque, A., et al. 2011. The effect of recombinant E-cadherin substratum on the differentiation of endoderm-derived hepatocyte-like cells from embryonic stem cells. Biomaterials 32: 2032-2042.
3. Ghanbari, A., et al. 2013. Sonic hedgehog inhibition induces mouse embryonic stem cells to differentiate toward definitive endoderm. Indian J. Exp. Biol. 51: 201-207.