SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-17 (S-20): sc-17355

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.

CHROMOSOMAL LOCATION

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

SOURCE

Sox-17 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus 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-17355 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sox-17 (S-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 (S-20) is also recommended for detection of Sox-17 in additional species, including canine, bovine and porcine.

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 (S-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, MCF7 whole cell lysate: sc-2206 or PC-3 cell lysate: sc-2220.

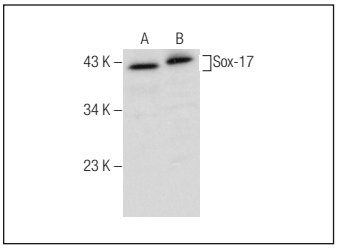
RESEARCH USE

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

STORAGE

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

DATA



Sox-17 (S-20): sc-17355. Western blot analysis of Sox-17 expression in MCF7 (**A**) and PC-3 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. zur Nieden, N.I., et al. 2007. Gene profiling on mixed embryonic stem cell populations reveals a biphasic role for β-catenin in osteogenic differentiation. Mol. Endocrinol. 21: 674-685.
2. de Jong, J., et al. 2008. Differential expression of Sox-17 and Sox-2 in germ cells and stem cells has biological and clinical implications. J. Pathol. 215: 21-30.
3. Wearne, K.A., et al. 2008. Temporal changes in the carbohydrates expressed on BG01 human embryonic stem cells during differentiation as embryoid bodies. Glycoconj. J. 25: 121-136.
4. Carpino, G., et al. 2012. Biliary tree stem/progenitor cells in glands of extrahepatic and intraheptic bile ducts: an anatomical *in situ* study yielding evidence of maturational lineages. J. Anat. 220: 186-199.
5. Jaramillo, M. and Banerjee, I. 2012. Endothelial cell co-culture mediates maturation of human embryonic stem cell to pancreatic Insulin producing cells in a directed differentiation approach. J. Vis. Exp. E-published.
6. Bignone, P.A., et al. 2013. Identification of human embryonic progenitor cell targeting peptides using phage display. PLoS ONE 8: e58200.

PROTOCOLS

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