SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-2 (H-65): sc-20088



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 DNAbinding 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: SOX2 (human) mapping to 3q26.33; Sox2 (mouse) mapping to 3 A3.

SOURCE

Sox-2 (H-65) is a rabbit polyclonal antibody raised against amino acids 131-195 mapping within an internal region of Sox-2 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-20088 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

Sox-2 (H-65) is recommended for detection of Sox-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-2 (H-65) is also recommended for detection of Sox-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sox-2 siRNA (h): sc-38408, Sox-2 siRNA (m): sc-38409, Sox-2 shRNA Plasmid (h): sc-38408-SH, Sox-2 shRNA Plasmid (m): sc-38409-SH, Sox-2 shRNA (h) Lentiviral Particles: sc-38408-V and Sox-2 shRNA (m) Lentiviral Particles: sc-38409-V.

Sox-2 (H-65) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sox-2: 34 kDa.

Positive Controls: rat small intestine extract: sc-364811.

STORAGE

Store at 4° C, **D0 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.

DATA





Sox-2 (H-65): sc-20088. Western blot analysis of Sox-2 expression in mouse embryonic stem cell lysates. Kindly provided by Dr. Nobuaki Kikyo, Stem Cell Institute, University of Minnesota. Sox-2 (H-65): sc-20088. Western blot analysis of human recombinant Sox-2 fusion protein.

SELECT PRODUCT CITATIONS

- Koch, H., et al. 1979. Diagnosis of acute gastrointestinal hemorrhages. MMW 121: 975-976.
- Salmina, K., et al. 2010. Up-regulation of the embryonic self-renewal network through reversible polyploidy in irradiated p53-mutant tumour cells. Exp. Cell Res. 316: 2099-2112.
- 3. Pan, C., et al. 2010. Reprogramming human fibroblasts using HIV-1 TAT recombinant proteins OCT4, SOX2, KLF4 and c-MYC. Mol. Biol. Rep. 37: 2117-2124.
- 4. Pan, C., et al. 2010. An economical single-sided antibody incubation method for Western blotting. J. Virol. Methods 169: 409-411.
- Kim, E.Y., et al. 2010. Differences between cellular and molecular profiles of induced pluripotent stem cells generated from mouse embryonic fibroblasts. Cell Reprogram. 12: 627-639.
- Kim, H.M., et al. 2010. Obox4 regulates the expression of histone family genes and promotes differentiation of mouse embryonic stem cells. FEBS Lett. 584: 605-611.
- 7. Pessac, B., et al. 2011. Hematopoietic progenitors express embryonic stem cell and germ layer genes. C. R. Biol. 334: 300-306.
- Ye, F., et al. 2011. Expression of Sox2 in human ovarian epithelial carcinoma. J. Cancer Res. Clin. Oncol. 137: 131-137.
- Wang, Z., et al. 2011. Differentiation of neuronal cells from NIH/3T3 fibroblasts under defined conditions. Dev. Growth Differ. 53: 357-365.
- Jung, J.E., et al. 2012. Sprouty1 regulates neural and endothelial differentiation of mouse embryonic stem cells. Stem Cells Dev. 21: 554-561.

MONOS Satisfation Guaranteed

Try Sox-2 (E-4): sc-365823 or Sox-2 (D-9): sc-398254, our highly recommended monoclonal aternatives to Sox-2 (H-65). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see Sox-2 (E-4): sc-365823.