SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-30 (G-1): sc-390333

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sox-30 (SRY (sex determining region Y)-box 30) 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-30 is expressed in testis and may act as a transcriptional regulator after forming a protein complex with other proteins. Sox-30 may be involved in the differentiation of developing male germ cells. Two transcript variants encoding distinct isoforms have been identified for the human Sox-30 gene. Sox family transcription factors influence cell differentiation, development and sex determination. Sox-30 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

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.

CHROMOSOMAL LOCATION

Genetic locus: SOX30 (human) mapping to 5q33.3; Sox30 (mouse) mapping to 11 B1.1.

SOURCE

Sox-30 (G-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 56-74 near the N-terminus of Sox-30 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} 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-390333 X, 200 µg/0.1 ml.

Sox-30 (G-1) is available conjugated to agarose (sc-390333 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390333 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390333 PE), fluorescein (sc-390333 FITC), Alexa Fluor® 488 (sc-390333 AF488), Alexa Fluor® 546 (sc-390333 AF546), Alexa Fluor® 594 (sc-390333 AF594) or Alexa Fluor® 647 (sc-390333 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390333 AF680) or Alexa Fluor® 790 (sc-390333 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390333 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

Sox-30 (G-1) is recommended for detection of Sox-30 of mouse, rat and 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), 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).

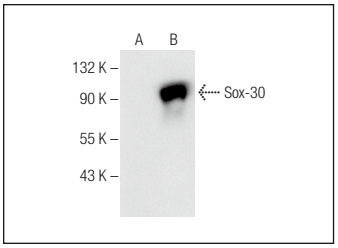
Suitable for use as control antibody for Sox-30 siRNA (h): sc-36529, Sox-30 siRNA (m): sc-36530, Sox-30 shRNA Plasmid (h): sc-36529-SH, Sox-30 shRNA Plasmid (m): sc-36530-SH, Sox-30 shRNA (h) Lentiviral Particles: sc-36529-V and Sox-30 shRNA (m) Lentiviral Particles: sc-36530-V.

Sox-30 (G-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

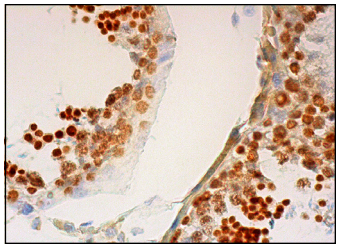
Molecular Weight of Sox-30: 94 kDa.

Positive Controls: Sox-30 (h): 293T Lysate: sc-114493.

DATA



Sox-30 (G-1): sc-390333. Western blot analysis of Sox-30 expression in non-transfected: sc-117752 (**A**) and human Sox-30 transfected: sc-114493 (**B**) 293T whole cell lysates.



Sox-30 (G-1): sc-390333. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in seminiferous ducts.

SELECT PRODUCT CITATIONS

1. Feng, C.A., et al. 2017. SOX30 is required for male fertility in mice. Sci. Rep. 7: 17619.
2. Sakamoto, M., et al. 2022. Paternally inherited H3K27me3 affects chromatin accessibility in mouse embryos produced by round spermatid injection. Development 149: dev200696.

STORAGE

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

PROTOCOLS

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