SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-17 (3.5CH): sc-130295

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.

CHROMOSOMAL LOCATION

Genetic locus: Sox17 (mouse) mapping to 1 A1.

SOURCE

Sox-17 (3.5CH) is a mouse monoclonal antibody raised against recombinant Sox-17 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Sox-17 (3.5CH) is available conjugated to agarose (sc-130295 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-130295 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130295 PE), fluorescein (sc-130295 FITC), Alexa Fluor® 488 (sc-130295 AF488), Alexa Fluor® 546 (sc-130295 AF546), Alexa Fluor® 594 (sc-130295 AF594) or Alexa Fluor® 647 (sc-130295 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-130295 AF680) or Alexa Fluor® 790 (sc-130295 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Sox-17 (3.5CH) is recommended for detection of Sox-17 of mouse 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-17 siRNA (m): sc-38430, Sox-17 shRNA Plasmid (m): sc-38430-SH and Sox-17 shRNA (m) Lentiviral Particles: sc-38430-V.

Molecular Weight of Sox-17: 45 kDa.

Positive Controls: Sox-17 (m): 293 Lysate: sc-179488 or mouse testis extract: sc-2405.

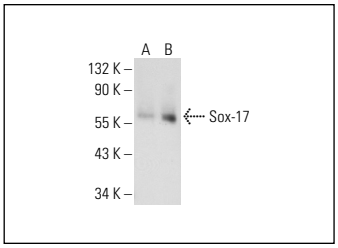
STORAGE

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

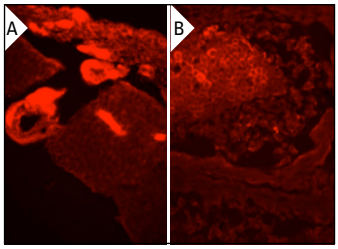
RESEARCH USE

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

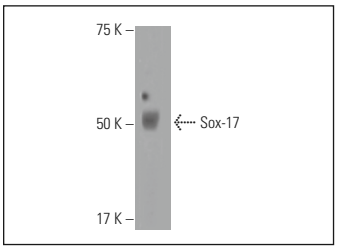
DATA



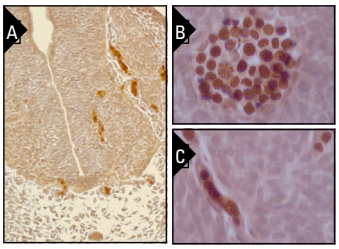
Sox-17 (3.5CH): sc-130295. Western blot analysis of Sox-17 expression in non-transfected: sc-110760 (**A**) and mouse Sox-17 transfected: sc-179488 (**B**) 293T whole cell lysates.



Sox-17 (3.5CH): sc-130295. Immunofluorescence staining of E11.5 mouse embryo showing Sox 17 expression in endothelial cells (**A**) and gut endoderm (**B**). Kindly provided by Peter Dias, PhD at Bioclinova.



Sox-17 (3.5CH): sc-130295. Western blot analysis of Sox-17 expression in MDCK cell lysate. Kindly provided by Peter Dias, PhD at Bioclinova.



Sox-17 (3.5CH): sc-130295. Immunoperoxidase staining of E11.5 mouse embryo showing Sox 17 expression in endothelial cells at low magnification (**A**) and high magnification (**B**,**C**). Kindly provided by Peter Dias, PhD at Bioclinova.

SELECT PRODUCT CITATIONS

1. Fu, D.Y., et al. 2015. Decreased expression of SOX17 is associated with tumor progression and poor prognosis in breast cancer. Tumour Biol. 36: 8025-8034.
2. Begentas, O.C., et al. 2021. Generation and characterization of human induced pluripotent stem cell line METUi001-A from a 25-year-old male patient with relapsing-remitting multiple sclerosis. Stem Cell Res. 53: 102370.
3. Zhang, X., et al. 2022. 5-aminolevulinate improves metabolic recovery and cell survival of the liver following cold preservation. Theranostics 12: 2908-2927.
4. Yu, X., et al. 2023. Oocyte arrested at metaphase II stage were derived from human pluripotent stem cells *in vitro*. Stem Cell Rev. Rep. 19: 1067-1081.
5. Ma, R., et al. 2024. Low concentrations of saracatinib promote definitive endoderm differentiation through inhibition of FAK-YAP signaling axis. Cell Commun. Signal. 22: 300.

PROTOCOLS

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