

HoxA5 (N-20): sc-13199

BACKGROUND

HoxA5 (previously identified as Hox-1.3) is a transcriptional regulator of multiple target genes, including p53 and the progesterone receptor. It is a potent transactivator of p53 and may affect the response of breast cancer cells to DNA damage. In primary breast carcinomas, loss of p53 expression is coupled with loss of HoxA5 expression, suggesting that the loss of HoxA5 expression is important in tumorigenesis. HoxA5 is dynamically expressed during gut development and organogenesis of the respiratory tract, and is continuously expressed from the neonatal period into adult stages in cerebellar Purkinje cells. Expression of HoxA5 is necessary for the region-specific differentiation of the endoderm and differentiation of the myeloid pathway. HoxA5 is also essential for correct specification of the cervical and upper thoracic region of the skeleton and for proper patterning of the embryo.

CHROMOSOMAL LOCATION

Genetic locus: HOXA5 (human) mapping to 7p15.2; Hoxa5 (mouse) mapping to 6 B3.

SOURCE

HoxA5 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxA5 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13199 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-13199 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HoxA5 (N-20) is recommended for detection of HoxA5 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), 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).

HoxA5 (N-20) is also recommended for detection of HoxA5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HoxA5 siRNA (h): sc-38678, HoxA5 siRNA (m): sc-38679, HoxA5 shRNA Plasmid (h): sc-38678-SH, HoxA5 shRNA Plasmid (m): sc-38679-SH, HoxA5 shRNA (h) Lentiviral Particles: sc-38678-V and HoxA5 shRNA (m) Lentiviral Particles: sc-38679-V.

HoxA5 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of HoxA5: 30 kDa.

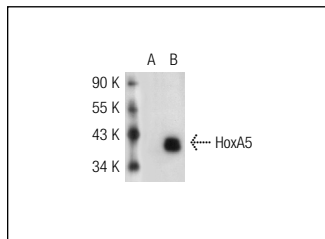
Molecular Weight (observed) of HoxA5: 43/55 kDa.

Positive Controls: HoxA5 (m): 293T Lysate: sc-120883, SK-N-SH cell lysate: sc-2410 or SK-N-SH cell lysate: sc-2410.

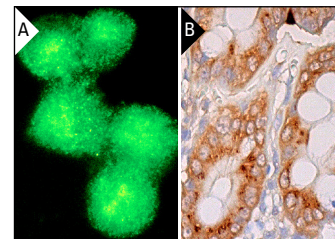
STORAGE

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

DATA



HoxA5 (N-20): sc-13199. Western blot analysis of HoxA5 expression in non-transfected: sc-117752 (A) and mouse HoxA5 transfected: sc-120883 (B) 293T whole cell lysates.



HoxA5 (N-20): sc-13199. Immunofluorescence staining of methanol-fixed Caki-1 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Furman, C., et al. 2004. Thioredoxin reductase 1 is upregulated in atherosclerotic plaques: specific induction of the promoter in human macrophages by oxidized low-density lipoproteins. *Free Radic. Biol. Med.* 37: 71-85.
2. Kömüves, L.G., et al. 2005. Analysis of Hox homeodomain proteins and gene transcripts in the epidermis. *Methods Mol. Biol.* 289: 157-170.
3. Volpe, M.V., et al. 2008. Unique spatial and cellular expression patterns of HoxA5, HoxB4, and HoxB6 proteins in normal developing murine lung are modified in pulmonary hypoplasia. *Birth Defects Res. Part A Clin. Mol. Teratol.* 82: 571-584.

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.

MONOS
Satisfaction
Guaranteed

Try **HoxA5 (C-11): sc-365784** or **HoxA5 (C-12): sc-515385**, our highly recommended monoclonal alternatives to HoxA5 (N-20).