

HoxA5 (m): 293T Lysate: sc-120883

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.

REFERENCES

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2. Sanlioglu, S., et al. 1998. Regulation of Purkinje cell-specific promoter by homeodomain proteins: repression by engrailed-2 vs. synergistic activation by Hoxa5 and Hoxb7. *J. Neurobiol.* 36: 559-571.
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4. Crooks, G.M., et al. 1999. Constitutive HoxA5 expression inhibits erythropoiesis and increases myelopoiesis from human hematopoietic progenitors. *Blood* 94: 519-528.
5. Larochelle, C., et al. 1999. Multiple *cis*-acting regulatory regions are required for restricted spatio-temporal hoxa5 gene expression. *Dev. Dyn.* 214: 127-140.
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7. Raman, V., et al. 2000. Compromised HoxA5 function can limit p53 expression in human breast tumours. *Nature* 405: 974-978.
8. Raman, V., et al. 2000. HoxA5 regulates expression of the progesterone receptor. *J. Biol. Chem.* 275: 26551-26555.

CHROMOSOMAL LOCATION

Genetic locus: Hoxa5 (mouse) mapping to 6 B3.

PRODUCT

HoxA5 (m): 293T Lysate represents a lysate of mouse HoxA5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

HoxA5 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive HoxA5 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

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