

HoxA11 (739C1a): sc-81288

BACKGROUND

HOX genes play a fundamental role in the development of the vertebrate central nervous system, heart, axial skeleton, limbs, gut, urogenital tract and external genitalia. These genes are important for morphogenesis in multicellular organisms, as they encode a highly conserved family of transcription factors and specify the embryonic body pattern by providing cells with specific positional identities on the anterior-posterior axis. The homeobox gene HOXA11, also designated homeobox 11 (HOX11), belongs to the AbdB homeobox family. HoxA11 is necessary for fertility in females as it is a regulator of the cyclic development of the adult endometrium and embryonic uterine development. The expression of HoxA11 increases drastically during the mid-luteal stage of the menstrual cycle, which is necessary for implantation of the blastocyst.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 142958. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Wong, K.H., et al. 2003. HoxA11 regulates stromal cell death and proliferation during neonatal uterine development. *Mol. Endocrinol.* 18: 184-193.
3. Wang, L.F., et al. 2004. Expression of HoxA11 gene in human endometrium. *Am. J. Obstet. Gynecol.* 191: 767-772.
4. Lynch, V.J., et al. 2004. Adaptive evolution of HoxA11 and HoxA13 at the origin of the uterus in mammals. *Proc. Biol. Sci.* 271: 2201-2207.
5. Speleman, F., et al. 2005. A new recurrence of HoxA10 and HoxA11 in a subset of T cell acute lymphoblastic leukemias. *Leukemia* 19: 358-366.
6. Eun Kwon, H. and Taylor, H.S. 2005. The role of HOX genes in human implantation. *Ann. N.Y. Acad. Sci.* 1034: 1-18.
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CHROMOSOMAL LOCATION

Genetic locus: HOXA11 (human) mapping to 7p15.2; Hoxa11 (mouse) mapping to 6 B3.

SOURCE

HoxA11 (739C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of HoxA11 of human origin.

PRODUCT

Each vial contains 100 µg in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

PROTOCOLS

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

APPLICATIONS

HoxA11 (739C1a) is recommended for detection of HoxA11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

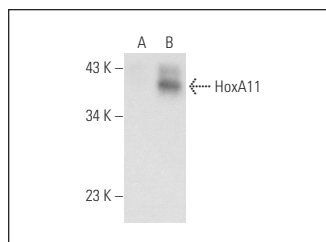
Suitable for use as control antibody for HoxA11 siRNA (h): sc-60802, HoxA11 siRNA (m): sc-60803, HoxA11 shRNA Plasmid (h): sc-60802-SH, HoxA11 shRNA Plasmid (m): sc-60803-SH, HoxA11 shRNA (h) Lentiviral Particles: sc-60802-V and HoxA11 shRNA (m) Lentiviral Particles: sc-60803-V.

Molecular Weight (predicted) of HoxA11: 34 kDa.

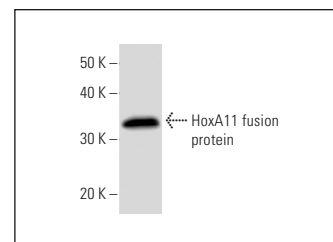
Molecular Weight (observed) of HoxA11: 29/37-42 kDa.

Positive Controls: HoxA11 (h): 293T Lysate: sc-115833 or Jurkat nuclear extract: sc-2132.

DATA



HoxA11 (739C1a): sc-81288. Western blot analysis of HoxA11 expression in non-transfected: sc-117752 (A) and human HoxA11 transfected: sc-115833 (B) 293T whole cell lysates.



HoxA11 (739C1a): sc-81288. Western Blot analysis of human recombinant HoxA11 fusion protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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