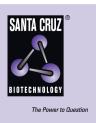
SANTA CRUZ BIOTECHNOLOGY, INC.

HoxC11 (HOX5J232): sc-81293



BACKGROUND

Homeobox (HOX) genes, which share a highly conserved 183-bp sequence, encode proteins capable of binding to specific DNA sequences and functioning as transcription factors. During embryogenesis, HOX genes play a critical role in the spatial and temporal differentiation of cells. HoxC11 (homeobox C11), also known as HOX3H, is a transcription factor belonging to the Abd-B homeobox family. The Abd-B family of Hox proteins are related to the *Drosophila* Abdominal-B gene and differ from other Hox proteins because they do not contain the conserved pentapeptide motif. HoxC11 is highly expressed in fetal tissues, particularly fetal intestine, suggesting that it may be involved in early intestinal development. HoxC11 localizes to the nucleus and contains one homeobox DNA-binding domain. It binds to the promoter element of lactase-phlorizin hydrolase (LCT), stimulating LCT transcription. HoxC11 is also believed to activate the transcription of S-100 β chain.

REFERENCES

- 1. Scott, M.P. 1992. Vertebrate homeobox gene nomenclature. Cell 71: 551-553.
- Mitchelmore, C., Troelsen, J.T., Sjöström, H. and Norén, O. 1998. The HOXC11 homeodomain protein interacts with the lactase-phlorizin hydrolase promoter and stimulates HNF1α-dependent transcription. J. Biol. Chem. 273: 13297-13306.
- Sur, I.P. and Toftg
 ard, R. 2000. Repression of transcription by HoxC11
 upon phorbol ester stimulation. Mol. Cell Biol. Res. Commun. 3: 367-373.
- Wellik, D.M., Hawkes, P.J. and Capecchi, M.R. 2002. Hox.paralogous genes are essential for metanephric kidney induction. Genes Dev. 16: 1423-1432.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605559. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Gu, B.W., Wang, Q., Wang, J.M., Xue, Y.Q., Fang, J., Wong, K.F., Chen, B., Shi, Z.Z., Shi, J.Y., Bai, X.T., Wu, D.H., Chen, Z. and Chen, S.J. 2003. Major form of NUP98/HOXC11 fusion in adult AML with t(11;12)(p15;q13) translocation exhibits aberrant *trans*-regulatory activity. Leukemia 17: 1858-1864.

CHROMOSOMAL LOCATION

Genetic locus: HOXC11 (human) mapping to 12q13.13; Hoxc11 (mouse) mapping to 15 F3.

SOURCE

HoxC11 (HOX5J232) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of HoxC11 of human origin.

PRODUCT

Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

RESEARCH USE

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

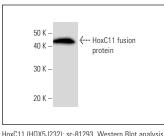
APPLICATIONS

HoxC11 (HOX5J232) is recommended for detection of HoxC11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for HoxC11 siRNA (h): sc-75283, HoxC11 siRNA (m): sc-75284, HoxC11 shRNA Plasmid (h): sc-75283-SH, HoxC11 shRNA Plasmid (m): sc-75284-SH, HoxC11 shRNA (h) Lentiviral Particles: sc-75283-V and HoxC11 shRNA (m) Lentiviral Particles: sc-75284-V.

Molecular Weight of HoxC11: 34 kDa.

DATA



of human recombinant HoxC11 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.

PROTOCOLS

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