HoxB13 (m): 293T Lysate: sc-125463



The Power to Question

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. HoxB13 is a sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis. HoxB13 is highly expressed in the prostate gland from the embryonic stages to adulthood and is required for normal differentiation and secretory function of that organ. HoxB13 is primarily expressed in the nucleus, but is cytoplasmic throughout fetal skin development and some hyperproliferative skin conditions.

REFERENCES

- Nakahara, Y., et al. 1992. Allergic bronchopulmonary aspergillosis caused by Aspergillus terreus presenting lobar collapse. Intern. Med. 31: 140-142.
- Zeltser, L., et al. 1996. HoxB13: a new Hox gene in a distant region of the HOXB cluster maintains colinearity. Development 122: 2475-2484.
- 3. Stelnicki, E.J., et al. 1998. Modulation of the human homeobox genes PRX2 and HOXB13 in scarless fetal wounds. J. Invest. Dermatol. 111: 57-63.
- Economides, K.D., et al. 2003. HoxB13 is required for normal differentiation and secretory function of the ventral prostate. Development 130: 2061-2069.
- 5. Komuves, L.G., et al. 2003. HoxB13 homeodomain protein is cytoplasmic throughout fetal skin development. Dev. Dyn. 227: 192-202.
- Jung, C., et al. 2004. HoxB13 homeodomain protein suppresses the growth of prostate cancer cells by the negative regulation of T cell factor 4. Cancer Res. 64: 3046-3051.
- 7. Jung, C., et al. 2004. HOXB13 induces growth suppression of prostate cancer cells as a repressor of hormone-activated androgen receptor signaling. Cancer Res. 64: 9185-9192.
- 8. Ma, X.J., et al., 2004. A two-gene expression ratio predicts clinical outcome in breast cancer patients treated with tamoxifen. Cancer Cell 5: 607-616.
- 9. Dhanasekaran, S.M., et al. 2005. Molecular profiling of human prostate tissues: insights into gene expression patterns of prostate development during puberty. FASEB J. 19: 243-245.

CHROMOSOMAL LOCATION

Genetic locus: Hoxb13 (mouse) mapping to 11 D.

PRODUCT

HoxB13 (m): 293T Lysate represents a lysate of mouse HoxB13 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.

PROTOCOLS

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

APPLICATIONS

HoxB13 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive HoxB13 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com