SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

HoxB7 siRNA (h): sc-45835

BACKGROUND

The Hox proteins play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with the anterior-posterior body axis. The mammalian HOX gene complex consists of 39 genes that are located on 4 linkage groups, which are dispersed over 4 chromosomes. A segment of the HoxB7 proximal promoter drives renal expression of reporter genes specifically in the ureteric bud and collecting ducts. Expression levels of HoxB7 are lower in lymph node metastasis-positive cancer tissues than negative cancer tissues. These results suggest that aberrant expression of HOX genes is related to the development of breast cancer and malignant behavior of cancer cells.

REFERENCES

1. Felicetti, F., et al. 2004. Role of PLZF in melanoma progression. Oncogene 23: 4567-4576.
2. Oxburgh, L., et al. 2004. TGFβ superfamily signals are required for morphogenesis of the kidney mesenchyme progenitor population. Development 131: 4593-4605.
3. Watanabe, T. and Costantini, F. 2004. Real-time analysis of ureteric bud branching morphogenesis *in vitro*. Dev. Biol. 271: 98-108.
4. Yu, O.H., et al. 2004. Overexpression of Ret leads to vesicoureteric reflux in mice. Am. J. Physiol. Renal Physiol. 287: F1123-F1130.
5. Makiyama, K., et al. 2005. Aberrant expression of HOX genes in human invasive breast carcinoma. Oncol. Rep. 13: 673-679.
6. Plaisier, E., et al. 2005. Identification of two candidate collecting duct cell-specific *cis*-acting elements in the HoxB7 promoter region. Biochim. Biophys. Acta 1727: 106-115.
7. SWISS-PROT/TrEMBL (P09629). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

Genetic locus: HOXB7 (human) mapping to 17q21.32.

PRODUCT

HoxB7 siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HoxB7 shRNA Plasmid (h): sc-45835-SH and HoxB7 shRNA (h) Lentiviral Particles: sc-45835-V as alternate gene silencing products.

For independent verification of HoxB7 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45835A, sc-45835B and sc-45835C.

PROTOCOLS

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

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

HoxB7 siRNA (h) is recommended for the inhibition of HoxB7 expression in human cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

GENE EXPRESSION MONITORING

HoxB7 (747C4a): sc-81292 is recommended as a control antibody for monitoring of HoxB7 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor HoxB7 gene expression knockdown using RT-PCR Primer: HoxB7 (h)-PR: sc-45835-PR (20 µl, 547 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

SELECT PRODUCT CITATIONS

1. Klein, D., et al. 2013. Hox genes are involved in vascular wall-resident multipotent stem cell differentiation into smooth muscle cells. Sci. Rep. 3: 2178.
2. Joo, M.K., et al. 2016. The roles of HOXB7 in promoting migration, invasion, and anti-apoptosis in gastric cancer. J. Gastroenterol. Hepatol. 31: 1717-1726.

RESEARCH USE

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