



HoxC9 siRNA (m): sc-75290

BACKGROUND

The Hox proteins are a family of transcription factors that 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. Hox proteins are involved in controlling axial patterning, leukemias and hereditary malformations. HoxC9 (homeobox protein Hox-C9), also known as HOX3 or HOX3B, is a member of the Abd-B homeobox (Hox) family. It is a 260 amino acid long nuclear protein that contains one homeobox DNA-binding domain. HoxC9 plays a role in the regulation of development, providing cells with positional identities on the anterior-posterior body axis. In addition, HoxC9 is expressed in esophageal cancer cells and may be involved in cancer development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Hoxc9 (mouse) mapping to 15 F3.

PROTOCOLS

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

PRODUCT

HoxC9 siRNA (m) is a pool of 2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HoxC9 shRNA Plasmid (m): sc-75290-SH and HoxC9 shRNA (m) Lentiviral Particles: sc-75290-V as alternate gene silencing products.

For independent verification of HoxC9 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-75290A and sc-75290B.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

HoxC9 siRNA (m) is recommended for the inhibition of HoxC9 expression in mouse 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 μ M in 66 μ l. 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor HoxC9 gene expression knockdown using RT-PCR Primer: HoxC9 (m)-PR: sc-75290-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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