

FHOD1 siRNA (m): sc-155893

BACKGROUND

The limb deformity (ld) locus influences normal limb development and gives rise to alternative mRNAs that can translate into a family of protein products known as formins. Formins play a crucial role in cytoskeletal reorganization by influencing Actin filament assembly. The temporal genetic hierarchy influencing normal limb development can deregulate and mediate mammalian developmental syndromes. FHOD1 induces the formation of and associates with bundled Actin stress fibers in response to the activity of the Rho-ROCK cascade. It influences several cellular activities including cell migration, cytoskeletal arrangement, signal transduction and gene expression.

REFERENCES

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4. O'Rourke, D.A., et al. 2000. Hepatocyte growth factor induces MAPK-dependent formin IV translocation in renal epithelial cells. *J. Am. Soc. Nephrol.* 11: 2212-2221.
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CHROMOSOMAL LOCATION

Genetic locus: Fhod1 (mouse) mapping to 8 D3.

PRODUCT

FHOD1 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see FHOD1 shRNA Plasmid (m): sc-155893-SH and FHOD1 shRNA (m) Lentiviral Particles: sc-155893-V as alternate gene silencing products.

For independent verification of FHOD1 (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-155893A, sc-155893B and sc-155893C.

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

FHOD1 siRNA (m) is recommended for the inhibition of FHOD1 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 FHOD1 gene expression knockdown using RT-PCR Primer: FHOD1 (m)-PR: sc-155893-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.

PROTOCOLS

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