SANTA CRUZ BIOTECHNOLOGY, INC.

MOV10L1 siRNA (h): sc-75816

BACKGROUND

MOV10 is a RNA helicase that is required for RNA-mediated gene silencing by RISC (RNA-induced silencing complex). Significantly, MOV10 is also required for the transcription and replication of the human hepatitis delta virus, also known as hepatitis D. Belonging to the same family as MOV10, MOV10L1 (moloney leukemia virus 10-like protein 1) is a 1,211 amino acid RNA helicase that is expressed as three isoforms. Interestingly, isoform 1 is expressed exclusively in testis and isoform 2 is specifically expressed in cardiac myocytes. Isoform 1 may play a role in male germ cell development, whereas isoform 2 has been shown to potentiate phenylephrine-induced hypertrophic response in cardiomyocytes. Each isoform contains a RNA interaction motif, ATP binding site and helicase motif through which it carries out its function.

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CHROMOSOMAL LOCATION

Genetic locus: MOV10L1 (human) mapping to 22q13.33.

PROTOCOLS

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

PRODUCT

MOV10L1 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 MOV10L1 shRNA Plasmid (h): sc-75816-SH and MOV10L1 shRNA (h) Lentiviral Particles: sc-75816-V as alternate gene silencing products.

For independent verification of MOV10L1 (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-75816A, sc-75816B and sc-75816C.

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

MOV10L1 siRNA (h) is recommended for the inhibition of MOV10L1 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor MOV10L1 gene expression knockdown using RT-PCR Primer: MOV10L1 (h)-PR: sc-75816-PR (20 µl). 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.