

Morc siRNA (h): sc-106232

BACKGROUND

Mammalian spermatogenesis is a complex developmental process. Mutations at multiple loci and in structurally and functionally disparate genes in the genome affect gametogenesis. The analysis of mutations has provided insight into biochemical pathways required for completion of this process. The Morc, or microrchidia, is an autosomal recessive mutation, which results in the arrest of spermatogenesis early in prophase I of meiosis. The Morc gene acts specifically during male gametogenesis and encodes a protein expressed specifically in male germ cells. Morc maps to mouse chromosome 16 B5 and human chromosome 3q13.13.

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CHROMOSOMAL LOCATION

Genetic locus: MORC1 (human) mapping to 3q13.13.

PRODUCT

Morc 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Morc shRNA Plasmid (h): sc-106232-SH and Morc shRNA (h) Lentiviral Particles: sc-106232-V as alternate gene silencing products.

For independent verification of Morc (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-106232A, sc-106232B and sc-106232C.

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

Morc siRNA (h) is recommended for the inhibition of Morc 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 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 Morc gene expression knockdown using RT-PCR Primer: Morc (h)-PR: sc-106232-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.