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SANTA CRUZ BIOTECHNOLOGY, INC.

Odf3L1 siRNA (m): sc-150179

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The major cytoskeletal structures in the mammalian sperm tail are the outer dense fibers (Odfs) and the fibrous sheath. The Odfs are located on the outside of the axoneme and help maintain the passive elastic structures and elastic recoil of the sperm tail. Human Odfs consist of approximately 10 major and at least 15 minor proteins. The major proteins, including Odf1, Odf2 and Odf3, compose a family of proteins that are preferentially expressed during mammalian spermiogenesis. Odf3 is expressed during the latter part of spermatogenesis in flagella of elongated spermatids and mature sperm. A member of the Odf3 family, Odf3L1 (outer dense fiber protein 3-like protein 1) is a 274 amino acid protein containing two DUF1309 repeats. The gene encoding Odf3L1 maps to human chromosome 15q24.2 and mouse chromosome 9 B.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Odf3l1 (mouse) mapping to 9 B.

PRODUCT

Odf3L1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Odf3L1 shRNA Plasmid (m): sc-150179-SH and Odf3L1 shRNA (m) Lentiviral Particles: sc-150179-V as alternate gene silencing products.

For independent verification of Odf3L1 (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-150179A, sc-150179B and sc-150179C.

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

Odf3L1 siRNA (m) is recommended for the inhibition of Odf3L1 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 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 Odf3L1 gene expression knockdown using RT-PCR Primer: Odf3L1 (m)-PR: sc-150179-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.

PROTOCOLS

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