SANTA CRUZ BIOTECHNOLOGY, INC.

Lipocalin-6 siRNA (h): sc-92959

BACKGROUND

The Lipocalin family is composed of structurally conserved hydrophobic ligand binding proteins and is represented in all major taxonomic groups from prokaryotes to primates. Members of the lipocalin family are characterized by several common molecular-recognition properties: the ability to bind a range of small hydrophobic molecules, binding to specific cell-surface receptors and the formation of complexes with soluble macromolecules. Lipocalin-6, also known as LCN5, hLcn5, UNQ643 or LCN6, is a 163 amino acid protein that is predominantly expressed in epididymis. Lipocalin-6 locatizes to the head and tail of spermatozoa, with the highest concentration on the post-acrosomal region of the head. Belonging to the calycin superfamily, Lipocalin-6 may play a role in sperm maturation. The gene encoding Lipocalin-6 maps to human chromosome 9q34.3, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: LCN6 (human) mapping to 9q34.3.

PRODUCT

Lipocalin-6 siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Lipocalin-6 shRNA Plasmid (h): sc-92959-SH and Lipocalin-6 shRNA (h) Lentiviral Particles: sc-92959-V as alternate gene silencing products.

For independent verification of Lipocalin-6 (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-92959A and sc-92959B.

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

Lipocalin-6 siRNA (h) is recommended for the inhibition of Lipocalin-6 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 Lipocalin-6 gene expression knockdown using RT-PCR Primer: Lipocalin-6 (h)-PR: sc-92959-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.