Lipocalin-10 siRNA (m): sc-146744



The Power to Question

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-10, also known as LCN10, is a 187 amino acid secreted protein belonging to the calycin superfamily. Lipocalin-10 is thought to participate in male fertility and acts as a retinoid carrier protein within the epididymis. Lipocalin-10 is encoded by a gene located on human chromosome 9, which consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes.

REFERENCES

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- 4. Humphray, S.J., Oliver, K., Hunt, A.R., Plumb, R.W., Loveland, J.E., Howe, K.L., Andrews, T.D., Searle, S., Hunt, S.E., Scott, C.E., Jones, M.C., Ainscough, R., Almeida, J.P., Ambrose, K.D., et. al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
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- Suzuki, K., Yu, X., Chaurand, P., Araki, Y., Lareyre, J.J., Caprioli, R.M., Orgebin-Crist, M.C. and Matusik, R.J. 2007. Epididymis-specific lipocalin promoters. Asian J. Androl. 9: 515-521.

CHROMOSOMAL LOCATION

Genetic locus: Lcn10 (mouse) mapping to 2 A3.

PRODUCT

Lipocalin-10 siRNA (m) is a target-specific 19-25 nt siRNA 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 Lipocalin-10 shRNA Plasmid (m): sc-146744-SH and Lipocalin-10 shRNA (m) Lentiviral Particles: sc-146744-V as alternate gene silencing products.

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.

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

Lipocalin-10 siRNA (m) is recommended for the inhibition of Lipocalin-10 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 Lipocalin-10 gene expression knockdown using RT-PCR Primer: Lipocalin-10 (m)-PR: sc-146744-PR (20 μ I). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com