SANTA CRUZ BIOTECHNOLOGY, INC.

sentan siRNA (m): sc-140639

BACKGROUND

Sentan, also known as SNTN, is a 147 amino acid protein that belongs to the S-100 family. Sentan, which means "tip" in Japanese, is expressed exclusively at the cilium tip where it localizes between the cell membrane and peripheral A-subfibers. The sentan protein may be a component of the linker structure that bridges the ciliary membrane and peripheral singlet microtubules. It has been suggested that sentan is the first molecular component of the ciliary tip to bridge the cell membrane and peripheral singlet microtubules, making the distal portion of the cilia narrow and stiff to allow for better airway clearance or ovum transport. Motile cilia are observed on the respiratory epithelium, along the female reproductive tract and on the ependymal cells lining the ventricles of the brain. The sentan gene is conserved in chimpanzee, bovine, mouse, rat and chicken, and maps to human chromosome 3p14.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Sntn (mouse) mapping to 14 A1.

PROTOCOLS

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

PRODUCT

sentan 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 sentan shRNA Plasmid (m): sc-140639-SH and sentan shRNA (m) Lentiviral Particles: sc-140639-V as alternate gene silencing products.

For independent verification of sentan (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-140639A, sc-140639B and sc-140639C.

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

sentan siRNA (m) is recommended for the inhibition of sentan 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 sentan gene expression knockdown using RT-PCR Primer: sentan (m)-PR: sc-140639-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.