

SCRN2 siRNA (m): sc-153273

BACKGROUND

The SCRIN (Secernin) gene family has three vertebrate paralogs, i.e. SCRIN1, SCRIN2 and SCRIN3, which are closely linked to human HOXA, HOXB and HOXD cluster, respectively. SCRIN2 (secernin-2) is a 425 amino acid protein that belongs to the peptidase C69 family and the Secernin subfamily. Vertebrate SCRIN genes showed a topology of the form (A)(BC), i.e. (Hsa2 Hsa7)(Hsa17), with SCRIN2 falling outside the SCRIN3-SCRIN1 cluster. The SCRIN2 gene is conserved in canine, bovine, mouse, rat and zebrafish, and maps to human chromosome 17q21.32. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Chromosome 17 is linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Scrn2 (mouse) mapping to 11 D.

PRODUCT

SCRN2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SCRN2 shRNA Plasmid (m): sc-153273-SH and SCRN2 shRNA (m) Lentiviral Particles: sc-153273-V as alternate gene silencing products.

For independent verification of SCRIN2 (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-153273A, sc-153273B and sc-153273C.

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

SCRIN2 siRNA (m) is recommended for the inhibition of SCRIN2 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 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 SCRIN2 gene expression knockdown using RT-PCR Primer: SCRIN2 (m)-PR: sc-153273-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.