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SANTA CRUZ BIOTECHNOLOGY, INC.

LRFN1 siRNA (m): sc-149033

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

LRFN1 (leucine rich repeat and fibronectin type III domain containing 1), also known as SALM2, is a 771 amino acid single-pass type I membrane protein that belongs to the LRFN family. Containing a fibronectin type-III domain, an Ig-like (immunoglobulin-like) domain, a LRRCT domain, a LRRNT domain and seven LRR (leucine-rich repeats), LRFN1 is thought to promote neurite outgrowth in hippocampal neurons and is involved in the regulation and maintenance of excitatory synapses. LRFN1 forms heteromeric complexes with LRFN2, LRFN3, LFRN4 and LFRN5, but does not have the ability to form homomeric complexes across cell junctions of adjacent cells like other LRFN family members. The PDZ-binding motif of LRFN1 is required for neurite outgrowth promotion and for SAP 97-, NE-dlg- and PSD-95-binding. LRFN1 is encoded by a gene located on human chromosome 19q13.2 and mouse chromosome 7 A3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Lrfn1 (mouse) mapping to 7 A3.

PROTOCOLS

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

PRODUCT

LRFN1 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 LRFN1 shRNA Plasmid (m): sc-149033-SH and LRFN1 shRNA (m) Lentiviral Particles: sc-149033-V as alternate gene silencing products.

For independent verification of LRFN1 (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-149033A, sc-149033B and sc-149033C.

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

LRFN1 siRNA (m) is recommended for the inhibition of LRFN1 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 LRFN1 gene expression knockdown using RT-PCR Primer: LRFN1 (m)-PR: sc-149033-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.