SANTA CRUZ BIOTECHNOLOGY, INC.

Lingo-2 siRNA (m): sc-146735

BACKGROUND

Lingo-2 (leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 2), also known as LERN3 (leucine-rich repeat neuronal protein 3) or LRRN6C, is a 606 amino acid single-pass type I membrane protein. Lingo-2 contains one immunoglobulin-like C2-type domain and 13 leucine-rich repeats. Lingo-2 is a member of the LRR gene family and has been linked to essential tremor and Parkinson's disease. Lingo-2 has a high degree of homology (61%) with Lingo-1, a regulator of neuronal death, and the expression of Lingo-2 seems to be restricted to neuronal tissue.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Lingo2 (mouse) mapping to 4 A5.

PRODUCT

Lingo-2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Lingo-2 shRNA Plasmid (m): sc-146735-SH and Lingo-2 shRNA (m) Lentiviral Particles: sc-146735-V as alternate gene silencing products.

For independent verification of Lingo-2 (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-146735A, sc-146735B and sc-146735C.

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

Lingo-2 siRNA (m) is recommended for the inhibition of Lingo-2 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 Lingo-2 gene expression knockdown using RT-PCR Primer: Lingo-2 (m)-PR: sc-146735-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.

PROTOCOLS

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