

NXNL2 siRNA (m): sc-150133

BACKGROUND

NXNL2 (Nucleoredoxin-like protein 2) is a 156 amino acid protein belonging to the Nucleoredoxin family. Other members of the Nucleoredoxin family include Nucleoredoxin (NXN) and NXNL1 (Nucleoredoxin-like protein 1). NXNL2 contains a conserved 139 amino acid thioredoxin (Trx) domain. Thioredoxin serves as a general protein disulphide oxidoreductase. NXNL1 and NXNL2 have been shown to encode rod-derived cone viability factors, RdCVF and RdCVF2, respectively. Expressed in selected regions of the brain as well as the eye, NXNL2 maps to human chromosome 9q22.1 and mouse chromosome 13 A5. Two isoforms exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Nxnl2* (mouse) mapping to 13 A5.

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.

PRODUCT

NXNL2 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 NXNL2 shRNA Plasmid (m): sc-150133-SH and NXNL2 shRNA (m) Lentiviral Particles: sc-150133-V as alternate gene silencing products.

For independent verification of NXNL2 (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-150133A, sc-150133B and sc-150133C.

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

NXNL2 siRNA (m) is recommended for the inhibition of NXNL2 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 NXNL2 gene expression knockdown using RT-PCR Primer: NXNL2 (m)-PR: sc-150133-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.