SANTA CRUZ BIOTECHNOLOGY, INC.

LNX1 siRNA (m): sc-60957

BACKGROUND

LNX1 (ligand of NUMB protein X1, LNX, PDZ domain-containing RING finger protein 2, PDZRN2) is a RING finger and PDZ domain containing protein that associates with NUMB, a phosphotyrosine-binding (PTB) domain-containing protein that functions as a cell fate determinant. Studies indicate that the protein contains an N-terminal PTB domain-binding motif and four PDZ domains. Northern blot analysis has detected the expression of LNX1 in heart, placenta, kindney, pancreas and brain tissues. By radiation hybrid mapping, the LNX gene was localized to human chromosome 4q12 between marker D4S1577 and marker D4S1594. Research suggests that the presence of multiple protein binding domains involved in signal transduction and association with NUMB and SKIP may suggest an important role for LNX in tumorogenesis.

REFERENCES

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4. Nie, J., et al. 2002. LNX functions as a RING type E3 ubiquitin ligase that targets the cell fate determinant Numb for ubiquitin-dependent degradation. EMBO J. 21: 93-102.
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7. Sollerbrant, K., et al. 2003. The coxsackievirus and adenovirus receptor (CAR) forms a complex with the PDZ domain-containing protein ligand-of-Numb protein-X (LNX). J. Biol. Chem. 278: 7439-7444.
8. Armbruester, V., et al. 2004. Np9 protein of human endogenous retrovirus K interacts with ligand of Numb protein X. J. Virol. 78: 10310-10319.
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CHROMOSOMAL LOCATION

Genetic locus: Lnx1 (mouse) mapping to 5 C3.3.

PROTOCOLS

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

PRODUCT

LNX1 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 LNX1 shRNA Plasmid (m): sc-60957-SH and LNX1 shRNA (m) Lentiviral Particles: sc-60957-V as alternate gene silencing products.

For independent verification of LNX1 (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-60957A, sc-60957B and sc-60957C.

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

LNX1 siRNA (m) is recommended for the inhibition of LNX1 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 LNX1 gene expression knockdown using RT-PCR Primer: LNX1 (m)-PR: sc-60957-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.