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Produktinformation

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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

LRRC50 siRNA (m): sc-149090

BACKGROUND

The leucine-rich repeat (LRR) is a 20-30 amino acid motif that forms a hydrophobic α/β horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRRs contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. LRRC50 (leucine-rich repeat containing 50) is a 725 amino acid protein that localizes to the cellular projection, as well as to the spindle and the cytoplasm, and contains six LRRs. Existing as multiple alternatively spliced isoforms, LRRC50 functions as a cilum-specific protein that is required for the maintenance of ciliary architecture and is also involved in the regulation of both Actin-based brush border and microtubule-based cilia microvilli. Due to its association with microvilli, LRRC50 may be involved in the pathogenesis of polycystic kidney disease.

REFERENCES

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4. Kedzierski, L., Montgomery, J., Curtis, J. and Handman, E. 2004. Leucine-rich repeats in host-pathogen interactions. Arch. Immunol. Ther. Exp. 52: 104-112.
5. Enkhbayar, P., Kamiya, M., Osaki, M., Matsumoto, T. and Matsushima, N. 2004. Structural principles of leucine-rich repeat (LRR) proteins. Proteins 54: 394-403.
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7. van Rooijen, E., Giles, R.H., Voest, E.E., van Rooijen, C., Schulte-Merker, S. and van Eeden, F.J. 2008. LRRC50, a conserved ciliary protein implicated in polycystic kidney disease. J. Am. Soc. Nephrol. 19: 1128-1138.

CHROMOSOMAL LOCATION

Genetic locus: Dnaaf1 (mouse) mapping to 8 E1.

PRODUCT

LRRC50 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 LRRC50 shRNA Plasmid (m): sc-149090-SH and LRRC50 shRNA (m) Lentiviral Particles: sc-149090-V as alternate gene silencing products.

For independent verification of LRRC50 (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-149090A, sc-149090B and sc-149090C.

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

LRRC50 siRNA (m) is recommended for the inhibition of LRRC50 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 LRRC50 gene expression knockdown using RT-PCR Primer: LRRC50 (m)-PR: sc-149090-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.