



LRCH2 siRNA (h): sc-90990

BACKGROUND

LRCH2 (leucine-rich repeat and calponin homology domain-containing protein 2) is a 765 amino acid protein that contains nine LRR (leucine-rich repeats) and one CH (calponin-homology) domain. LRCH2 is a member of the leucine-rich repeat and calponin homology domain-containing protein family. Members of this family contain multiple N-terminal leucine-rich repeats, in addition to a C-terminal calponin homology domain, a type of domain that mediates interactions with actin filaments. The gene that encodes LRCH2 is made up of approximately 123,457 bases and maps to human chromosome Xq23. Human chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

REFERENCES

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3. Bojesen, A., et al. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. *Diabetes Care* 29: 1591-1598.
4. Maggio, M.C., et al. 2007. Polycystic ovary and gonadoblastoma in Turner's syndrome. *Minerva Pediatr.* 59: 397-401.
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CHROMOSOMAL LOCATION

Genetic locus: LRCH2 (human) mapping to Xq23.

PRODUCT

LRCH2 siRNA (h) 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 LRCH2 shRNA Plasmid (h): sc-90990-SH and LRCH2 shRNA (h) Lentiviral Particles: sc-90990-V as alternate gene silencing products.

For independent verification of LRCH2 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-90990A, sc-90990B and sc-90990C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

LRCH2 siRNA (h) is recommended for the inhibition of LRCH2 expression in human 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 LRCH2 gene expression knockdown using RT-PCR Primer: LRCH2 (h)-PR: sc-90990-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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