

LHFPL3 siRNA (h): sc-89842

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, has been linked to breakpoints in the HMGI-C gene. LHFPL3 is a protein that acts as a fusion partner with HMGI-C in lipomas. An LHFPL3 family member, LHFPL3 (lipoma HMGI-C fusion partner-like 3 protein) is a 222 amino acid multi-pass membrane protein. The amino acid sequence of LHFPL3 shares a 40% identity with the N-terminus of LHFPL3. Computational analysis suggests that LHFPL3 belongs to the tetraspanin superfamily of transmembrane proteins that play an important role in the control of cell proliferation, cellular adhesion and signaling. LHFPL3 has been discussed as a candidate gene in uterine leiomyomata. The gene encoding LHFPL3 maps to human chromosome 7q22.1 and mouse chromosome 5 A3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LHFPL3 (human) mapping to 7q22.2.

PROTOCOLS

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

PRODUCT

LHFPL3 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 LHFPL3 shRNA Plasmid (h): sc-89842-SH and LHFPL3 shRNA (h) Lentiviral Particles: sc-89842-V as alternate gene silencing products.

For independent verification of LHFPL3 (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-89842A, sc-89842B and sc-89842C.

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

LHFPL3 siRNA (h) is recommended for the inhibition of LHFPL3 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 LHFPL3 gene expression knockdown using RT-PCR Primer: LHFPL3 (h)-PR: sc-89842-PR (20 μ l). 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.