SANTA CRUZ BIOTECHNOLOGY, INC.

LHFPL2 siRNA (h): sc-91990

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The Power to Question

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, has been linked to breakpoints in the HMGI-C gene. LHFP (lipoma HMGIC fusion partner) is a multi-pass membrane protein that acts as a fusion partner with HMGI-C in a lipoma with the translocation t(12;13)(q13-q15;q12). An LHFP family member, LHFPL2 (lipoma HMGIC fusion partner-like 2 protein) is a 228 amino acid multi-pass membrane protein that is expressed in most tissues except brain and peripheral blood leukocytes. The gene encoding LHFPL2 maps to human chromosome 5, which is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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5. Shadduck, R.K., et al. 2007. Recent advances in myelodysplastic syndromes. Exp. Hematol. 35: 137-143.
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CHROMOSOMAL LOCATION

Genetic locus: LHFPL2 (human) mapping to 5q14.1.

PROTOCOLS

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

PRODUCT

LHFPL2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see LHFPL2 shRNA Plasmid (h): sc-91990-SH and LHFPL2 shRNA (h) Lentiviral Particles: sc-91990-V as alternate gene silencing products.

For independent verification of LHFPL2 (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-91990A, sc-91990B and sc-91990C.

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

LHFPL2 siRNA (h) is recommended for the inhibition of LHFPL2 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 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 LHFPL2 gene expression knockdown using RT-PCR Primer: LHFPL2 (h)-PR: sc-91990-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.