

LHFPL5 siRNA (m): sc-105613

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, have been linked to breakpoints in the HMGI-C gene. LHP (lipoma HMGIC fusion partner) is a 200 amino acid 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). As a LHP family member, LHFPL4 (lipoma HMGIC fusion partner-like 4 protein) is a 247 amino acid multi-pass membrane protein that is encoded by a gene which is found to be methylated in 55% of cervical cancers. This suggests that LHFPL4 is a novel methylation target specific for cervical cancer and may be evaluated for early detection and risk prediction. LHFPL4 shares 62% sequence similarity with LHFPL5, a protein which has been linked to normal function of the human cochlea. Mutations in the LHFPL5 gene cause non-syndromic sensorineural deafness autosomal recessive type 67 (DFNB67).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Lhpl5* (mouse) mapping to 17 A3.3.

PRODUCT

LHFPL5 siRNA (m) is a pool of 2 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 LHFPL5 shRNA Plasmid (m): sc-105613-SH and LHFPL5 shRNA (m) Lentiviral Particles: sc-105613-V as alternate gene silencing products.

For independent verification of LHFPL5 (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-105613A and sc-105613B.

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

LHFPL5 siRNA (m) is recommended for the inhibition of LHFPL5 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 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 LHFPL5 gene expression knockdown using RT-PCR Primer: LHFPL5 (m)-PR: sc-105613-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.

PROTOCOLS

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