SANTA CRUZ BIOTECHNOLOGY, INC.

LHFP siRNA (h): sc-75424

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, have been linked to breakpoints in the HMGI-C gene. LHFP (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). Located on chromosome 13q13.3, the gene encoding LHFP is in a region that is frequently targeted by chromosomal aberrations in lipomas. The LHFP/HMGIC fusion transcript expresses 69 amino acids encoded by frame-shift LHFP sequences and three DNA binding domains of HMGIC. The mouse homolog of LHFP shares 94% sequence similarity with the human protein. With the exception of peripheral blood leukocytes, LHFP is ubiquitously expressed.

REFERENCES

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2. Petit, M.M., et al. 1999. LHFP, a novel translocation partner gene of HMGIC in a lipoma, is a member of a new family of LHFP-like genes. Genomics 57: 438-441.
3. Rogalla, P., et al. 2002. Absence of HMGIC-LHFP fusion in pulmonary chondroid hamartomas with aberrations involving chromosomal regions 12q13 through 15 and 13q12 through q14. Cancer Genet. Cytogenet. 133: 90-93.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606710. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Nilsson, M., et al. 2005. Fusion of the HMGA2 and NFIB genes in lipoma. Virchows Arch. 447: 855-858.
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CHROMOSOMAL LOCATION

Genetic locus: LHFP (human) mapping to 13q13.3.

PRODUCT

LHFP 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 LHFP shRNA Plasmid (h): sc-75424-SH and LHFP shRNA (h) Lentiviral Particles: sc-75424-V as alternate gene silencing products.

For independent verification of LHFP (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-75424A, sc-75424B and sc-75424C.

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

LHFP siRNA (h) is recommended for the inhibition of LHFP 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 LHFP gene expression knockdown using RT-PCR Primer: LHFP (h)-PR: sc-75424-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.