SANTA CRUZ BIOTECHNOLOGY, INC.

L3MBTL3 siRNA (h): sc-95210

BACKGROUND

Polycomb group (PcG) proteins are important for maintaining the transcriptionally repressed state of target genes and are thought to function via chromatin modification. PcG proteins assemble into multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes over successive cell generations. PcG proteins are also required for normal maturation of myeloid progenitor cells. A putative PcG protein, L3MBTL3 (lethal(3)malignant brain tumor-like protein 3), also known as MBT-1 or KIAA1798, is a 780 amino acid protein containing three MBT repeats and one SAM (sterile alpha motif) domain. Localized to the nucleus, L3MBTL3 interacts with RING1B, another PcG protein that may be involved in the specification of anterior-posterior axis and cell proliferation in early development. L3MBTL3 exists as two isoforms produced by alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: L3MBTL3 (human) mapping to 6q23.1.

PRODUCT

L3MBTL3 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 L3MBTL3 shRNA Plasmid (h): sc-95210-SH and L3MBTL3 shRNA (h) Lentiviral Particles: sc-95210-V as alternate gene silencing products.

For independent verification of L3MBTL3 (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-95210A, sc-95210B and sc-95210C.

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

L3MBTL3 siRNA (h) is recommended for the inhibition of L3MBTL3 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 L3MBTL3 gene expression knockdown using RT-PCR Primer: L3MBTL3 (h)-PR: sc-95210-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.