SANTA CRUZ BIOTECHNOLOGY, INC.

L3MBTL siRNA (m): sc-146624

BACKGROUND

L3MBTL is member of the Polycomb group of proteins that function as transcriptional repressors in large protein complexes. L3MBTL contains three repeats of 100 residues called MBT repeats, and a C-terminal α-helical structure within a cavity lined by aromatic amino acids. The protein undergoes monoallelic methylation in hematopoietic tissues and is expressed in most human adult normal tissues. During interphase, L3MBTL localizes to the nucleus and completely associates with condensed chromosomes in mitotic cells. Together with Trithorax group proteins, L3MBTL is responsible for the coordinated regulation of patterns of gene activity. The human L3MBTL gene lies in a region of chromosome 20 that is frequently deleted in patients with myeloid malignancies and has been proposed as a candidate 20q tumor suppressor gene, implicating L3MBTL expression in some cases of myeloid leukemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: L3mbtl1 (mouse) mapping to 2 H2.

PRODUCT

L3MBTL siRNA (m) is a target-specific 19-25 nt siRNA 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 L3MBTL shRNA Plasmid (m): sc-146624-SH and L3MBTL shRNA (m) Lentiviral Particles: sc-146624-V as alternate gene silencing products.

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

L3MBTL siRNA (m) is recommended for the inhibition of L3MBTL 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 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 L3MBTL gene expression knockdown using RT-PCR Primer: L3MBTL (m)-PR: sc-146624-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.