

MTCP-1 siRNA (m): sc-149670

BACKGROUND

The mature T-cell proliferation 1 (MTCP-1) protein influences the leukemogenic process of mature T cell proliferation. Leukemic cells carrying a t(14;14)(q11;q32) chromosome translocation produce a gene product having sequence similarity with TCL1 and MTCP-1 oncoproteins. MTCP-1 encodes for a cytoplasmic product. Alternative splicing yields a short form (A) and a long form (B).

REFERENCES

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3. Madani, A., et al. 1995. The 8 kD product of the putative oncogene MTCP-1 is a mitochondrial protein. *Oncogene* 10: 2259-2262.
4. Du Bois, G.C., et al. 1998. Purification and characterization of recombinant forms of TCL-1 and MTCP-1 proteins. *Protein Expr. Purif.* 12: 215-225.
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6. Fu Z.Q., et al. 1999. Improving the diffraction quality of MTCP-1 crystals by post-crystallization soaking. *Acta Crystallogr. D, Biol. Crystallogr.* 55: 5-7.
7. Woffendin H., et al. 2000. Molecular analysis of the mature T cell proliferation-1 (MTCP-1) gene in Xq28-linked incontinentia pigmenti. *Eur. J. Hum. Genet.* 8: 239-240.
6. Chun, H.H., et al. 2002. TCL-1, MTCP-1 and TML-1 gene expression profile in non-leukemic clonal proliferations associated with ataxia-telangiectasia. *Int. J. Cancer* 97: 726-731.

CHROMOSOMAL LOCATION

Genetic locus: Mtcp1 (mouse) mapping to X A7.3.

PRODUCT

MTCP-1 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MTCP-1 shRNA Plasmid (m): sc-149670-SH and MTCP-1 shRNA (m) Lentiviral Particles: sc-149670-V as alternate gene silencing products.

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.

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

MTCP-1 siRNA (m) is recommended for the inhibition of MTCP-1 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 MTCP-1 gene expression knockdown using RT-PCR Primer: MTCP-1 (m)-PR: sc-149670-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.