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Cml3 siRNA (m): sc-142414

BACKGROUND

Cml3 (camello-like protein 3), also known as probable N-acetyltransferase CML3, is a 226 amino acid multi-pass membrane protein that contains one N-acetyltransferase domain and belongs to the camello family. Cml3 may play a role in regulation of gastrulation, and is encoded by a gene that maps to mouse chromosome 6 C3. The human homolog of Cml3, known as NAT-8L, N-acetyltransferase 8-like protein, N-acetylaspartate synthetase or CML3 (camello-like protein 3), is a 302 amino acid protein that plays a role in the regulation of lipogenesis by producing N-acetylaspartate acid. Defects in NAT-8L are the cause of N-acetylaspartate deficiency (NACED), a metabolic disorder resulting in truncal ataxia, marked developmental delay, seizures and secondary microcephaly.

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CHROMOSOMAL LOCATION

Genetic locus: Cml3 (mouse) mapping to 6 C3.

PROTOCOLS

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

PRODUCT

Cml3 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 Cml3 shRNA Plasmid (m): sc-142414-SH and Cml3 shRNA (m) Lentiviral Particles: sc-142414-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 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

Cml3 siRNA (m) is recommended for the inhibition of Cml3 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 Cml3 gene expression knockdown using RT-PCR Primer: Cml3 (m)-PR: sc-142414-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.