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NAT-8L siRNA (m): sc-149844

BACKGROUND

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. NAT-8L (N-acetyltransferase 8-like protein), also known as NAA synthetase (N-acetylaspartate synthetase), NACED or CML3 (canello-like protein 3), is a 302 amino acid single-pass membrane protein of the microsome, mitochondrion and rough endoplasmic reticulum. A member of the canello family and N-acyltransferase (NAT) superfamily, NAT-8L also localizes to the cytoplasm. NAT-8L is expressed in the brain where it assists in the maintenance of intact white matter and plays a role in lipogenesis. The gene encoding NAT-8L maps to human chromosome 4, which represents approximately 6% of the human genome, contains nearly 900 genes and is associated with Huntington's disease, Ellis-van Creveld syndrome and methylmalonic acidemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Nat8l (mouse) mapping to 5 B2.

PRODUCT

NAT-8L 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 NAT-8L shRNA Plasmid (m): sc-149844-SH and NAT-8L shRNA (m) Lentiviral Particles: sc-149844-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

NAT-8L siRNA (m) is recommended for the inhibition of NAT-8L 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 NAT-8L gene expression knockdown using RT-PCR Primer: NAT-8L (m)-PR: sc-149844-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.

PROTOCOLS

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