SANTA CRUZ BIOTECHNOLOGY, INC.

NDUFA7 siRNA (m): sc-149874

BACKGROUND

NDUFA7 (NADH dehydrogenase (ubiquinone) 1 α subcomplex, 7) is a 113 amino acid protein that localizes to both the inner mitochondrial membrane and to the matrix side of the peripheral membrane and belongs to the complex I NDUFA7 subunit family. Existing as a subunit of the multi-protein membrane respiratory chain NADH dehydrogenase complex (Complex I), NDUFA7 functions as an accessory protein that facilitates the transfer of electrons from NADH to the respiratory chain. Human NDUFA7 shares 89% sequence identity with its bovine counterpart, suggesting a conserved role between species. The gene encoding NDUFA7 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ndufa7 (mouse) mapping to 17 B1.

PROTOCOLS

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

PRODUCT

NDUFA7 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 NDUFA7 shRNA Plasmid (m): sc-149874-SH and NDUFA7 shRNA (m) Lentiviral Particles: sc-149874-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

NDUFA7 siRNA (m) is recommended for the inhibition of NDUFA7 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.