SANTA CRUZ BIOTECHNOLOGY, INC.

NDUFA6 siRNA (m): sc-149873

BACKGROUND

NDUFA6 (NADH dehydrogenase (ubiquinone) 1 α subcomplex, 6), also known as LYRM6 (LYR motif-containing protein 6), NADHB14 or B14, is a 128 amino acid protein that localizes to the matrix side of the mitochondrial membrane and belongs to the complex I LYR family. Existing as a subunit of the multi-protein membrane respiratory chain NADH dehydrogenase complex (Complex I), NDUFA6 functions as an accessory protein that facilitates the transfer of electrons from NADH to the respiratory chain. The gene encoding NDUFA6 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ndufa6 (mouse) mapping to 15 E1.

PROTOCOLS

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

PRODUCT

NDUFA6 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 NDUFA6 shRNA Plasmid (m): sc-149873-SH and NDUFA6 shRNA (m) Lentiviral Particles: sc-149873-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

NDUFA6 siRNA (m) is recommended for the inhibition of NDUFA6 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.