SANTA CRUZ BIOTECHNOLOGY, INC.

DHRS7B siRNA (m): sc-143034

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The Power to Question

BACKGROUND

DHRS7B (dehydrogenase/reductase SDR family member 7B), also known as CGI-93 or UNQ212/PRO238, is a 325 amino acid single-pass type II peroxisome membrane protein. Belonging to the short-chain dehydrogenases/reductases (SDR) family, DHRS7B is a putative oxidoreductase. The gene encoding DHRS7B maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, p53 and BRCA1. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth are both linked to mutations on chromosome 17. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

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CHROMOSOMAL LOCATION

Genetic locus: Dhrs7b (mouse) mapping to 11 B2.

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.

PRODUCT

DHRS7B 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 DHRS7B shRNA Plasmid (m): sc-143034-SH and DHRS7B shRNA (m) Lentiviral Particles: sc-143034-V as alternate gene silencing products.

SSTORAGE 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

DHRS7B siRNA (m) is recommended for the inhibition of DHRS7B 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor DHRS7B gene expression knockdown using RT-PCR Primer: DHRS7B (m)-PR: sc-143034-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.