SANTA CRUZ BIOTECHNOLOGY, INC.

DHRS13 siRNA (h): sc-93828

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The Power to Question

BACKGROUND

DHRS13 (dehydrogenase/reductase SDR family member 13), also known as UNQ419/PRO853, is a 377 amino acid secreted protein belonging to the short-chain dehydrogenases/reductases (SDR) family. DHRS13 is presumed to function as an oxidoreductase and is phosphorylated, potentially by ATM or ATR, upon DNA damage. DHRS13 exists as two isoforms produced by alternative splicing events. The gene encoding DHRS13 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Neurofibromatosis, dysregulated Schwann cell growth, Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are associated with chromosome 17.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: DHRS13 (human) mapping to 17q11.2.

PRODUCT

DHRS13 siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs 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 DHRS13 shRNA Plasmid (h): sc-93828-SH and DHRS13 shRNA (h) Lentiviral Particles: sc-93828-V as alternate gene silencing products.

For independent verification of DHRS13 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-93828A, sc-93828B and sc-93828C.

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

DHRS13 siRNA (h) is recommended for the inhibition of DHRS13 expression in human 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 DHRS13 gene expression knockdown using RT-PCR Primer: DHRS13 (h)-PR: sc-93828-PR (20 µl). 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.