SANTA CRUZ BIOTECHNOLOGY, INC.

DQX1 siRNA (h): sc-94703

BACKGROUND

DQX1 (DEAQ box RNA-dependent ATPase 1), also known as FLJ23757, is a 71 amino acid protein that contains one helicase ATP-binding domain and one helicase C-terminal domain. Localized to the nucleus, DQX1 catalyzes the conversion of ATP to ADP and a phosphate. Expressed as three isoforms produced by alternative splicing events, DQX1 is encoded by a gene that maps to human chomosome 2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2, including Harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DQX1 (human) mapping to 2p13.1.

PROTOCOLS

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

PRODUCT

DQX1 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 DQX1 shRNA Plasmid (h): sc-94703-SH and DQX1 shRNA (h) Lentiviral Particles: sc-94703-V as alternate gene silencing products.

For independent verification of DQX1 (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-94703A, sc-94703B and sc-94703C.

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

DQX1 siRNA (h) is recommended for the inhibition of DQX1 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 DQX1 gene expression knockdown using RT-PCR Primer: DQX1 (h)-PR: sc-94703-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.