SANTA CRUZ BIOTECHNOLOGY, INC.

SLC37A3 siRNA (h): sc-89692

BACKGROUND

SLC37A3 (solute carrier family 37 (glycerol-3-phosphate transporter), member 3), also known as sugar phosphate exchanger 3 (SPX3), is a 494 amino acid multi-pass membrane protein that belongs to the SLC37A family (also known as SLC37A sugar transporter family) of the major facilitator superfamily. As with all members of the SLC37A family (which includes SLC37A1, SLC37A2 and SLC37A4), SLC37A3 functions as a transmembrane sugar transporter. Specifically, SLC37A3 is involved in the transport of glycerol-3-phosphate. Three named SLC37A3 isoforms are produced by alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC37A3 (human) mapping to 7q34.

PRODUCT

SLC37A3 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 SLC37A3 shRNA Plasmid (h): sc-89692-SH and SLC37A3 shRNA (h) Lentiviral Particles: sc-89692-V as alternate gene silencing products.

For independent verification of SLC37A3 (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-89692A, sc-89692B and sc-89692C.

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

SLC37A3 siRNA (h) is recommended for the inhibition of SLC37A3 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 SLC37A3 gene expression knockdown using RT-PCR Primer: SLC37A3 (h)-PR: sc-89692-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.

PROTOCOLS

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