SANTA CRUZ BIOTECHNOLOGY, INC.

SLC35B4 siRNA (h): sc-89359

BACKGROUND

SLC35B4 (solute carrier family 35, member B4) is a 331 amino acid multi-pass membrane protein that belongs to the nucleotide-sugar transporter family and the SLC35B subfamily. Glycosyltransferases, such as SLC35B4, transport nucleotide sugars from the cytoplasm where they are synthesized, to the Golgi apparatus where they are utilized in the synthesis of glycoproteins, glycolipids, and proteoglycans. SLC35B4 specifically mediates the transport of UDP-xylose (UDP-Xyl) and UDP-N-acetylglucosamine (UDP-GlcNAc) from cytosol into Golgi. The SLC35B4 gene contains 10 exons and maps to human chromosome 7p33. Existing as three alternatively spliced isoforms, the SLC35B4 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans, S. pombe, S. cerevisiae, K. lactis, M. grisea* and *N. crassa*.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: SLC35B4 (human) mapping to 7q33.

PRODUCT

SLC35B4 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 SLC35B4 shRNA Plasmid (h): sc-89359-SH and SLC35B4 shRNA (h) Lentiviral Particles: sc-89359-V as alternate gene silencing products.

For independent verification of SLC35B4 (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-89359A, sc-89359B and sc-89359C.

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

SLC35B4 siRNA (h) is recommended for the inhibition of SLC35B4 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 SLC35B4 gene expression knockdown using RT-PCR Primer: SLC35B4 (h)-PR: sc-89359-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.