

SLC35D2 siRNA (m): sc-153537

BACKGROUND

SLC35D2 (solute carrier family 35, member D2), also known as UDP-N-acetylglucosamine/UDP-glucose/GDP-mannose transporter, HFRC1, SQV7L or UGTREL8, is a 337 amino acid multi-pass membrane protein belonging to the TPT transporter family and SLC35D subfamily. Localizing to Golgi apparatus membrane, SLC35D2 is highly expressed in heart, kidney, small intestine, placenta, lung and peripheral blood leukocyte, with lower levels of expression found in skeletal muscle and spleen. SLC35D2 functions as an antiporter, mediating the translocation of nucleotide sugars from the cytosol to the lumen, and may be involved in growth factor signaling by taking part in heparan sulfate synthesis. SLC35D2 exists as two alternatively spliced isoforms.

REFERENCES

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3. Ishida, N., Kuba, T., Aoki, K., Miyatake, S., Kawakita, M. and Sanai, Y. 2005. Identification and characterization of human Golgi nucleotide sugar transporter SLC35D2, a novel member of the SLC35 nucleotide sugar transporter family. *Genomics* 85: 106-116.
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CHROMOSOMAL LOCATION

Genetic locus: Slc35d2 (mouse) mapping to 13 B3.

PRODUCT

SLC35D2 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SLC35D2 shRNA Plasmid (m): sc-153537-SH and SLC35D2 shRNA (m) Lentiviral Particles: sc-153537-V as alternate gene silencing products.

For independent verification of SLC35D2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153537A, sc-153537B and sc-153537C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

SLC35D2 siRNA (m) is recommended for the inhibition of SLC35D2 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 μ M in 66 μ l. 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 SLC35D2 gene expression knockdown using RT-PCR Primer: SLC35D2 (m)-PR: sc-153537-PR (20 μ l). 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.