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SANTA CRUZ BIOTECHNOLOGY, INC.

SLC35D1 siRNA (m): sc-153536

BACKGROUND

SLC35D1 (solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1), also known as UGTREL7, is a 355 amino acid multi-pass membrane protein that belongs to the TPT transporter family and the SLC35D subfamily. Ubiquitously expressed, SLC35D1 transports both UDP-glucuronic acid (UDP-GlcA) and UDP-N-acetylgalactosamine (UDP-GalNAc) from the cytoplasm to into the endoplasmic reticulum lumen. SLC35D1 may also participate in glucuronidation and/or chondroitin sulfate biosynthesis. Defects in SLC35D1 are a cause of Schneckenbecken dysplasia (SCHBCKD). Schneckenbecken dysplagia is a rare, autosomal recessive, lethal short-limbed skeletal dysplasia with platyspondylia. The SLC35D1 gene is conserved in chimpanzee, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans, A. thaliana* and rice, and maps to human chromosome 1p31.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Slc35d1 (mouse) mapping to 4 C6.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

SLC35D1 siRNA (m) is a target-specific 19-25 nt siRNA 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 SLC35D1 shRNA Plasmid (m): sc-153536-SH and SLC35D1 shRNA (m) Lentiviral Particles: sc-153536-V as alternate gene silencing products.

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

SLC35D1 siRNA (m) is recommended for the inhibition of SLC35D1 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 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 SLC35D1 gene expression knockdown using RT-PCR Primer: SLC35D1 (m)-PR: sc-153536-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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