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UXS1 siRNA (m): sc-154962

BACKGROUND

UXS1 (UDP-glucuronic acid decarboxylase 1), also known as UNQ2538, PRO6079 or UGD, is a 420 amino acid single-pass type II membrane protein that belongs to the sugar epimerase family and the UDP-glucuronic acid decarboxylase subfamily. Interacting with Akt1, UXS1 catalyzes the NAD-dependent decarboxylation of UDP-glucuronic acid to UDP-xylose. UXS1 is also necessary for the biosynthesis of the core tetrasaccharide in glycosaminoglycan biosynthesis. The gene that encodes UXS1 maps to human chromosome 2q12.2. As the second largest human chromosome, chromosome 2 consists of 237 million bases encoding over 1,400 genes.

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CHROMOSOMAL LOCATION

Genetic locus: *Uxs1* (mouse) mapping to 1 C1.1.

PROTOCOLS

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

PRODUCT

UXS1 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 UXS1 shRNA Plasmid (m): sc-154962-SH and UXS1 shRNA (m) Lentiviral Particles: sc-154962-V as alternate gene silencing products.

For independent verification of UXS1 (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-154962A, sc-154962B and sc-154962C.

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

UXS1 siRNA (m) is recommended for the inhibition of UXS1 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 UXS1 gene expression knockdown using RT-PCR Primer: UXS1 (m)-PR: sc-154962-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.