

2010209O12Rik siRNA (m): sc-108603

BACKGROUND

CSGlcA-T, also known as chondroitin polymerizing factor 2 (CHPF2), chondroitin sulfate glucuronyltransferase or chondroitin synthase-3 (CHSY3), is a 772 amino acid single-pass type II membrane protein of the Golgi apparatus that belongs to the chondroitin N-acetylgalactosaminyltransferase family. Widely expressed and existing as two alternatively spliced isoforms, CSGlcA-T is found at highest levels in small intestine, pancreas and placenta, with lower levels in heart, brain, kidney, and skeletal muscle where it transfers glucuronic acid from UDP-glucuronic acid to N-acetylgalactosamine residues of elongating chondroitin polymers. The gene encoding CSGlcA-T maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome and lissencephaly.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Chpf2* (mouse) mapping to 5 A3.

PRODUCT

2010209O12Rik 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 2010209O12Rik shRNA Plasmid (m): sc-108603-SH and 2010209O12Rik shRNA (m) Lentiviral Particles: sc-108603-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

2010209O12Rik siRNA (m) is recommended for the inhibition of 2010209O12Rik 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 2010209O12Rik gene expression knockdown using RT-PCR Primer: 2010209O12Rik (m)-PR: sc-108603-PR (20 μl). Annealing temperature for the primers should be $55-60^{\circ}\text{C}$ and the extension temperature should be $68-72^{\circ}\text{C}$.

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.