

OATP-H siRNA (m): sc-150154

BACKGROUND

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-H (organic anion transporter F), also known as SLC04C1 (solute carrier organic anion transporter family member 4C1), OATPX or SLC21A14 (solute carrier family 21 member 20), is a 724 amino acid member of the organic anion transporter protein family. As a multi-pass membrane protein, OATP-H mediates the Na⁺-independent, high affinity transport of pharmacological substances such as thyroxine, digoxin, methotrexate, cAMP and ouabain. OATP-H is also thought to be involved in the uptake of the dipeptidyl peptidase-4 inhibitor sitagliptin. OATP-H is expressed highly in kidney, with lower expression found in fetal kidney and liver.

REFERENCES

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5. Hagenbuch, B. 2007. Cellular entry of thyroid hormones by organic anion transporting polypeptides. *Best Pract. Res. Clin. Endocrinol. Metab.* 21: 209-221.
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CHROMOSOMAL LOCATION

Genetic locus: Slco4c1 (mouse) mapping to 1 D.

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.

PRODUCT

OATP-H 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 OATP-H shRNA Plasmid (m): sc-150154-SH and OATP-H shRNA (m) Lentiviral Particles: sc-150154-V as alternate gene silencing products.

For independent verification of OATP-H (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-150154A, sc-150154B and sc-150154C.

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

OATP-H siRNA (m) is recommended for the inhibition of OATP-H 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 OATP-H gene expression knockdown using RT-PCR Primer: OATP-H (m)-PR: sc-150154-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.