SANTA CRUZ BIOTECHNOLOGY, INC.

SLC10A6 siRNA (m): sc-153487

BACKGROUND

The SLC10 family of sodium/bile salt cotransporters contains over 50 members in animal, plant and bacterial species. SLC10A6 (solute carrier family 10, member 6), also known as SOAT (sodium-dependent organic anion transporter), is a 373 amino acid multi-pass membrane protein belonging to the sodium:bile acid symporter family. Highly expressed in testis, placenta and pancreas, SLC10A6 transports sulfoconjugated steroid hormones, as well as taurolithocholic acid-3-sulfate and sulfoconjugated pyrenes in a sodium-dependent manner. SLC10A6 plays an important role in the cellular delivery of specific prohormones in testis, placenta, adrenal gland and other peripheral tissues. SLC10A6 has nine transmembrane domains, with an N-terminus outside the cell and an intracellular C-terminus.

REFERENCES

1. Geyer, J., et al. 2004. Identification of a sodium-dependent organic anion transporter from rat adrenal gland. Biochem. Biophys. Res. Commun. 316: 300-306.
2. Hagenbuch, B. and Dawson, P. 2004. The sodium bile salt cotransport family SLC10. Pflugers Arch. 447: 566-570.
3. Geyer, J., et al. 2006. The solute carrier family SLC10: more than a family of bile acid transporters regarding function and phylogenetic relationships. Naunyn Schmiedebergs Arch. Pharmacol. 372: 413-431.
4. Fernandes, C.F., et al. 2007. The novel putative bile acid transporter SLC10A5 is highly expressed in liver and kidney. Biochem. Biophys. Res. Commun. 361: 26-32.
5. Godoy, J.R., et al. 2007. Molecular and phylogenetic characterization of a novel putative membrane transporter (SLC10A7), conserved in vertebrates and bacteria. Eur. J. Cell Biol. 86: 445-460.
6. Geyer, J., et al. 2007. Cloning and functional characterization of human sodium-dependent organic anion transporter (SLC10A6). J. Biol. Chem. 282: 19728-19741.

CHROMOSOMAL LOCATION

Genetic locus: Slc10a6 (mouse) mapping to 5 E5.

PRODUCT

SLC10A6 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SLC10A6 shRNA Plasmid (m): sc-153487-SH and SLC10A6 shRNA (m) Lentiviral Particles: sc-153487-V as alternate gene silencing products.

For independent verification of SLC10A6 (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-153487A, sc-153487B and sc-153487C.

PROTOCOLS

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

SLC10A6 siRNA (m) is recommended for the inhibition of SLC10A6 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 SLC10A6 gene expression knockdown using RT-PCR Primer: SLC10A6 (m)-PR: sc-153487-PR (20 µl). 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.