SANTA CRUZ BIOTECHNOLOGY, INC.

SLC22A9 siRNA (h): sc-96491

BACKGROUND

Solute carrier family 22 member 9 (SLC22A9), also known as Organic anion transporter 4 (OAT4), is a 553 amino acid member of the organic cation transporter family of proteins. Members of the SLC22 family mediate anion transport primarily and are expressed primarily in liver and kidney. SLC22A9, a multi-pass membrane protein, is the only protein in the family that is expressed also in placenta. SLC22A9 has been shown to transport certain organic anions and other members of the SLC22 family, however, fewer numbers of substrates have been identified for SLC22A9, suggesting that it may have greater specificity than the other members of the family. Two isoforms of SLC22A9 exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC22A9 (human) mapping to 11q12.3.

PRODUCT

SLC22A9 siRNA (h) 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 SLC22A9 shRNA Plasmid (h): sc-96491-SH and SLC22A9 shRNA (h) Lentiviral Particles: sc-96491-V as alternate gene silencing products.

For independent verification of SLC22A9 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-96491A, sc-96491B and sc-96491C.

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

SLC22A9 siRNA (h) is recommended for the inhibition of SLC22A9 expression in human 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 SLC22A9 gene expression knockdown using RT-PCR Primer: SLC22A9 (h)-PR: sc-96491-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.