

SLC26A11 siRNA (h): sc-94012

BACKGROUND

SLC26A11 (solute carrier family 26, member 11) is a 606 amino acid multi-pass membrane protein that belongs to the SLC26A/SuIP transporter family. Containing one STAS domain, the SLC26A11 protein exhibits sodium-independent sulfate anion transporter activity that may cooperate with SLC26A2 to mediate DIDS-sensitive sulfate uptake into high endothelial venules endothelial cells (HEVEC). SLC26A11 is detected in all tissues tested with highest expression observed in brain, kidney, HEVEC and placenta and lowest in pancreas, skeletal muscle, liver, lung and heart. Containing 18 exons, the SLC26A11 gene is conserved in chimpanzee, canine, bovine, mouse, rat, zebrafish, mosquito, *S.pombe*, *S.cerevisiae*, *K.lactis*, *E.gossypii*, *M.grisea* and *N.crassa*, and maps to human chromosome 17q25.3. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC26A11 (human) mapping to 17q25.3.

PRODUCT

SLC26A11 siRNA (h) is a pool of 2 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 SLC26A11 shRNA Plasmid (h): sc-94012-SH and SLC26A11 shRNA (h) Lentiviral Particles: sc-94012-V as alternate gene silencing products.

For independent verification of SLC26A11 (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-94012A and sc-94012B.

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

SLC26A11 siRNA (h) is recommended for the inhibition of SLC26A11 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 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 SLC26A11 gene expression knockdown using RT-PCR Primer: SLC26A11 (h)-PR: sc-94012-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.

PROTOCOLS

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