

SLC12A9 siRNA (h): sc-89870

BACKGROUND

SLC12A9 (solute carrier family 12 member 9), also known as CIP1 (cation-chloride cotransporter-interacting protein 1), potassium-chloride transporter 9 or cation-chloride cotransporter 6 (CCC6), is a 914 amino acid member of the SLC12A transporter protein family. Localized to the cell membrane, SLC12A9 may act as an inhibitor of NKCC1. SLC12A9 is thought to be a subunit of a multimeric transport system, indicating that additional subunits may be required for protein function. SLC12A9 is a multi-pass membrane protein expressed at high levels in brain, kidney and placenta and at lower levels in heart, liver and lung. SLC12A9 is expressed as three isoforms produced by alternative splicing events and is encoded by a gene mapping to human chromosome 7.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC12A9 (human) mapping to 7q22.1.

PRODUCT

SLC12A9 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SLC12A9 shRNA Plasmid (h): sc-89870-SH and SLC12A9 shRNA (h) Lentiviral Particles: sc-89870-V as alternate gene silencing products.

For independent verification of SLC12A9 (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-89870A, sc-89870B and sc-89870C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

SLC12A9 siRNA (h) is recommended for the inhibition of SLC12A9 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 SLC12A9 gene expression knockdown using RT-PCR Primer: SLC12A9 (h)-PR: sc-89870-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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