

SLC25A35 siRNA (h): sc-94122

BACKGROUND

Members of the SLC25 family of mitochondrial carrier proteins are known transporters of molecules over the mitochondrial membrane and are highly expressed in the central nervous system. SLC25A35 (solute carrier family 25, member 35) is a 300 amino acid multi-pass membrane protein belonging to the SLC25 family of mitochondrial carrier proteins. Localizing to the inner mitochondrial membrane and containing three solcar repeats, SLC25A35 exists as four alternatively spliced isoforms. The gene encoding SLC25A35 is located on human chromosome 17p13.1. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth are both linked to mutations on Chromosome 17. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A35 (human) mapping to 17p13.1.

RESEARCH USE

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

PRODUCT

SLC25A35 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 SLC25A35 shRNA Plasmid (h): sc-94122-SH and SLC25A35 shRNA (h) Lentiviral Particles: sc-94122-V as alternate gene silencing products.

For independent verification of SLC25A35 (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-94122A, sc-94122B and sc-94122C.

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

SLC25A35 siRNA (h) is recommended for the inhibition of SLC25A35 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 SLC25A35 gene expression knockdown using RT-PCR Primer: SLC25A35 (h)-PR: sc-94122-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.