SANTA CRUZ BIOTECHNOLOGY, INC.

SLC6A15 siRNA (h): sc-95673

BACKGROUND

SLC6A15 (solute carrier family 6 (neutral amino acid transporter), member 15), also known as sodium-dependent neutral amino acid transporter B(0)AT2, transporter v7-3, NTT73 or sodium-coupled branched-chain amino-acid transporter 1 (SBAT1), is a 730 amino acid multi-pass membrane protein that acts as a sodium-dependent neutral amino acid transporter. A member of the sodium neurotransmitter symporter (SNF) family and SLC6A15 subfamily, SLC6A15 differs from other members of its family in that it does not appear to be chloride-dependent. SLC6A15 is expressed in brain and is encoded by a gene that maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC6A15 (human) mapping to 12q21.31.

PRODUCT

SLC6A15 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 SLC6A15 shRNA Plasmid (h): sc-95673-SH and SLC6A15 shRNA (h) Lentiviral Particles: sc-95673-V as alternate gene silencing products.

For independent verification of SLC6A15 (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-95673A, sc-95673B and sc-95673C.

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

SLC6A15 siRNA (h) is recommended for the inhibition of SLC6A15 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 SLC6A15 gene expression knockdown using RT-PCR Primer: SLC6A15 (h)-PR: sc-95673-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.

PROTOCOLS

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