SANTA CRUZ BIOTECHNOLOGY, INC.

XTRP2 siRNA (h): sc-91883

BACKGROUND

The solute carrier (SLC) family, also known as the neurotransmitter transporter family, is one of the largest transporter families in the human genome. The SLC6 subgroup, which includes the dopamine transporter (DAT), the serotonin transporter (SERT) and the norepinephrine transporter (NET), contains sodium/chloride dependent, high-affinity plasma transport proteins. Sodium/chloride-dependent transporter XTRP2, also known as solute carrier family 6 member 18 (SLC6A18), is a 628 amino acid member of the SLC family. XTRP2 is composed of 12 exons, 11 introns and 8 tandem repeats. Highly expressed in the kidney, SLC6A18 is classified as an orphan transporter.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC6A18 (human) mapping to 5p15.33.

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.

PRODUCT

XTRP2 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 XTRP2 shRNA Plasmid (h): sc-91883-SH and XTRP2 shRNA (h) Lentiviral Particles: sc-91883-V as alternate gene silencing products.

For independent verification of XTRP2 (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-91883A, sc-91883B and sc-91883C.

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

XTRP2 siRNA (h) is recommended for the inhibition of XTRP2 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 XTRP2 gene expression knockdown using RT-PCR Primer: XTRP2 (h)-PR: sc-91883-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.