

TSNAXIP1 siRNA (m): sc-154722

BACKGROUND

TSNAXIP1 (translin-associated factor X-interacting protein 1) is a 658 amino acid gene product believed to interact with TSNAX (Translin-associated factor X). TSNAX, a translin family protein, is often found as a sumoylated perinuclear association factor. The TSNAX gene is located immediately upstream of DISC1 (disrupted-in-schizophrenia-1) and together are candidate genes in relation to psychiatric illness, as one transcript variation may result from intergenic splicing to encode a novel TSNAX-DISC1 fusion protein. The gene encoding TSNAXIP1 is located on chromosome 16q22.1 which encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein.

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CHROMOSOMAL LOCATION

Genetic locus: Tsnaxip1 (mouse) mapping to 8 D3.

PRODUCT

TSNAXIP1 siRNA (m) 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 TSNAXIP1 shRNA Plasmid (m): sc-154722-SH and TSNAXIP1 shRNA (m) Lentiviral Particles: sc-154722-V as alternate gene silencing products.

For independent verification of TSNAXIP1 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154722A, sc-154722B and sc-154722C.

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

TSNAXIP1 siRNA (m) is recommended for the inhibition of TSNAXIP1 expression in mouse 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 TSNAXIP1 gene expression knockdown using RT-PCR Primer: TSNAXIP1 (m)-PR: sc-154722-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.