

CASPR3 siRNA (h): sc-92900

BACKGROUND

Neurexins comprise a family of neuronal cell surface proteins, which include neurexin I (NRXN1), neurexin II (NRXN2), neurexin III (NRXN3) and CASPR (neurexin IV). CASPR3 (contactin associated protein-like 3), also known as CNTNAP3A, is a 1,288 amino acid protein belonging to the neurexin family that exists as two alternatively spliced isoforms with different subcellular localization patterns: CASPR3 isoform 1 is a single-pass type I membrane protein whereas isoform 2 is a secreted protein. Suggested to play a role in nervous system cell recognition, CASPR3 is expressed in axons of the spinal cord, corpus callosum and basket cells of the cerebellum, as well as in oligodendrocytes and peripheral nerves. CASPR3 contains four laminin G-like domains, one F5/8 type C domain, two EGF-like domains and a fibrinogen C-terminal domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CNTNAP3 (human) mapping to 9p13.1.

PRODUCT

CASPR3 siRNA (h) is a target-specific 19-25 nt siRNA 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 CASPR3 shRNA Plasmid (h): sc-92900-SH and CASPR3 shRNA (h) Lentiviral Particles: sc-92900-V as alternate gene silencing products.

PROTOCOLS

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

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

CASPR3 siRNA (h) is recommended for the inhibition of CASPR3 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 CASPR3 gene expression knockdown using RT-PCR Primer: CASPR3 (h)-PR: sc-92900-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.