SANTA CRUZ BIOTECHNOLOGY, INC.

C10orf27 siRNA (h): sc-90763

BACKGROUND

C10orf27 (chromosome 10 open reading frame 27), also known as spatial, is a 351 amino acid cytoplasmic protein belonging to the spatial family. C10orf27 is suggested to play a role in spermatid differentiation. Existing as two alternatively spliced isoforms, C10orf27 is widely expressed in multiple tissues, including brain, thymus and testis. C10orf27 may be associated with multiple sclerosis (MS) susceptibility and pathogenesis. MS is an inflammatory disease that causes gradual destruction of myelin in the central nervous system. C10orf27 is encoded by a gene located on human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TBATA (human) mapping to 10q22.1.

PRODUCT

C10orf27 siRNA (h) is a pool of 2 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 C10orf27 shRNA Plasmid (h): sc-90763-SH and C10orf27 shRNA (h) Lentiviral Particles: sc-90763-V as alternate gene silencing products.

For independent verification of C10orf27 (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-90763A and sc-90763B.

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

C10orf27 siRNA (h) is recommended for the inhibition of C10orf27 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 C10orf27 gene expression knockdown using RT-PCR Primer: C10orf27 (h)-PR: sc-90763-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.