SANTA CRUZ BIOTECHNOLOGY, INC.

WBSCR28 siRNA (h): sc-89701

BACKGROUND

WBSCR28 (Williams-Beuren syndrome chromosomal region 28 protein homolog), also known as 1700111I05Rik, is a 265 amino acid multi-pass membrane protein that is expressed primarily in testis. WBSCR28 exists as two alternatively spliced isoforms, and is encoded by a gene mapping to human chromosome 7q11.23 and mouse chromosome 5 G2. The region encoding the WBSCR28 gene is deleted in patients with Williams-Beuren syndrome, a neurodevelopmental and multisystemic disease characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. The exact association between the WBSCR28 gene and Williams-Beuren syndrome has not been characterized.

REFERENCES

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3. Osborne, L.R., Joseph-George, A.M. and Scherer, S.W. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.
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CHROMOSOMAL LOCATION

Genetic locus: WBSCR28 (human) mapping to 7q11.23.

PRODUCT

WBSCR28 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 WBSCR28 shRNA Plasmid (h): sc-89701-SH and WBSCR28 shRNA (h) Lentiviral Particles: sc-89701-V as alternate gene silencing products.

For independent verification of WBSCR28 (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-89701A and sc-89701B.

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 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

WBSCR28 siRNA (h) is recommended for the inhibition of WBSCR28 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 WBSCR28 gene expression knockdown using RT-PCR Primer: WBSCR28 (h)-PR: sc-89701-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.