

WBSCR17 siRNA (h): sc-89800

BACKGROUND

Williams-Beuren syndrome (WBS) is an autosomal dominant genetic condition that is characterized by physical, cognitive and behavioral traits. The physical traits associated with WBS include facial dysmorphism, vascular stenoses, growth deficiencies, dental anomalies and neurologic and musculoskeletal abnormalities. WBSCR17 (Williams-Beuren syndrome chromosomal region 17 protein), also known as putative polypeptide N-acetylgalactosaminyltransferase-like protein 3, polypeptide GalNAc transferase-like protein 3, or GALNTL3, is a 598 amino acid single-pass type II membrane protein belonging to the glycosyltransferase 2 family and GalNAc-T subfamily. Containing one ricin B-type lectin domain, WBSCR17 localizes to Golgi apparatus membrane and is highly expressed in brain and heart. Utilizing manganese and calcium as cofactors, WBSCR17 may catalyze the initial reaction in O-linked oligosaccharide biosynthesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: WBSCR17 (human) mapping to 7q11.22.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

WBSCR17 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see WBSCR17 shRNA Plasmid (h): sc-89800-SH and WBSCR17 shRNA (h) Lentiviral Particles: sc-89800-V as alternate gene silencing products.

For independent verification of WBSCR17 (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-89800A, sc-89800B and sc-89800C.

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

WBSCR17 siRNA (h) is recommended for the inhibition of WBSCR17 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 WBSCR17 gene expression knockdown using RT-PCR Primer: WBSCR17 (h)-PR: sc-89800-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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