

WBSCR16 siRNA (m): sc-155245

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. WBSCR16 (Williams-Beuren syndrome chromosomal region 16 protein), also known as RCC1-like G exchanging factor-like protein, is a 464 amino acid protein that contains six RCC1 repeats. Ubiquitously expressed, WBSCR16 is encoded by a gene located in the Williams-Beuren syndrome (WBS) critical region. It is suggested that haploinsufficiency of WBSCR16 may be the cause of certain cardiovascular and musculo-skeletal abnormalities.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Wbscr16 (mouse) mapping to 5 G2.

PROTOCOLS

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

PRODUCT

WBSCR16 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 WBSCR16 shRNA Plasmid (m): sc-155245-SH and WBSCR16 shRNA (m) Lentiviral Particles: sc-155245-V as alternate gene silencing products.

For independent verification of WBSCR16 (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-155245A, sc-155245B and sc-155245C.

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

WBSCR16 siRNA (m) is recommended for the inhibition of WBSCR16 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 WBSCR16 gene expression knockdown using RT-PCR Primer: WBSCR16 (m)-PR: sc-155245-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.