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SANTA CRUZ BIOTECHNOLOGY, INC.

GSC2 siRNA (m): sc-145794

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GSC2 (homeobox protein goosecoid-2), also known as GSCL (homeobox protein goosecoid-like), is a 205 amino acid nuclear protein that shares high homolgy to GSC, a protein involved in the development of the lower mandible and its associated musculature as well as components of the inner ear and the external auditory meatus. Since its expression pattern begins in early embryo, GSC2 may play an indirect role in the development of neural crest derived structures. Due to its chromosomal location and its role in early development, the gene encoding GSC2 is a major candidate for del22q11.2 (DiGeorge or velocardiofacial) syndrome, a disease characterized by craniofacial defects, thymic hypoplasia, cardiovascular anomalies, velopharyngeal insufficiency and skeletal muscle hypotonia.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Gsc2 (mouse) mapping to 16 A3.

PRODUCT

GSC2 siRNA (m) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GSC2 shRNA Plasmid (m): sc-145794-SH and GSC2 shRNA (m) Lentiviral Particles: sc-145794-V as alternate gene silencing 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

GSC2 siRNA (m) is recommended for the inhibition of GSC2 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 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 GSC2 gene expression knockdown using RT-PCR Primer: GSC2 (m)-PR: sc-145794-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.