# 4930422G04Rik siRNA (m): sc-140043



The Power to Question

#### **BACKGROUND**

Human chromosome 4 represents approximately 6% of the human genome and contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded by a gene that is located on chromosome 4, and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease. C4orf21 (chromosome 4 open reading frame 21) is a 1,062 amino acid protein provisionally designated C4orf21 pending further characterization. The gene encoding C4orf21 maps to human chromosome 4.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: Zgrf1 (mouse) mapping to 3 G2.

#### **PRODUCT**

 $4930422G04Rik\ siRNA\ (m)$  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  $\mu M$  solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see  $4930422G04Rik\ shRNA\ Plasmid\ (m)$ : sc-140043-SH and  $4930422G04Rik\ shRNA\ (m)\ Lentiviral\ Particles: sc-140043-V\ as\ alternate\ gene\ silencing\ products.$ 

For independent verification of 4930422G04Rik (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-140043A, sc-140043B and sc-140043C.

## 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  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## **APPLICATIONS**

4930422G04Rik siRNA (m) is recommended for the inhibition of 4930422G04Rik 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 4930422G04Rik gene expression knockdown using RT-PCR Primer: 4930422G04Rik (m)-PR: sc-140043-PR (20  $\mu$ 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.

## **PROTOCOLS**

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

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