

# 1110018J18Rik siRNA (m): sc-108161

## BACKGROUND

1110018J18Rik is a 226 amino acid murine protein that functions as a rodent homolog of human C9orf21 and is encoded by a gene which maps to mouse chromosome 13 B3. Mouse chromosome 13 houses over 1,000 genes that encode for a variety of proteins, including zinc fingers, solute transporters, olfactory receptors and histones. The genes that are localized to chromosome 13 may play a role in autoimmunity, as well as in the pathogenesis of Chediak-Higashi syndrome, a rare autosomal recessive disorder that results in immune deficits and abnormal blood clotting, pigmentation and neurologic function.

## REFERENCES

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2. Kingsmore, S.F., et al. 1996. Physical mapping of the beige critical region on mouse chromosome 13. *Mamm. Genome* 7: 773-775.
3. Perou, C.M., et al. 1997. Comparative mapping in the beige-satin region of mouse chromosome 13. *Genomics* 39: 136-146.
4. Spritz, R.A. 1998. Genetic defects in Chediak-Higashi syndrome and the beige mouse. *J. Clin. Immunol.* 18: 97-105.
5. Ward, D.M., et al. 2000. Analysis of the lysosomal storage disease Chediak-Higashi syndrome. *Traffic* 1: 816-822.
6. Valenza-Schaerly, P., et al. 2001. A dominant modifier of transgene methylation is mapped by QTL analysis to mouse chromosome 13. *Genome Res.* 11: 382-388.
7. Ward, D.M., et al. 2002. Chediak-Higashi syndrome: a clinical and molecular view of a rare lysosomal storage disorder. *Curr. Mol. Med.* 2: 469-477.
8. Laporte, C., et al. 2003. The Sgp3 locus on mouse chromosome 13 regulates nephritogenic gp70 autoantigen expression and predisposes to autoimmunity. *J. Immunol.* 171: 3872-3877.

## CHROMOSOMAL LOCATION

Genetic locus: Aaed1 (mouse) mapping to 13 B3.

## PRODUCT

1110018J18Rik 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see 1110018J18Rik shRNA Plasmid (m): sc-108161-SH and 1110018J18Rik shRNA (m) Lentiviral Particles: sc-108161-V as alternate gene silencing products.

## PROTOCOLS

See our web site at [www.scbt.com](http://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  $\mu$ 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

1110018J18Rik siRNA (m) is recommended for the inhibition of 1110018J18Rik 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  $\mu$ M in 66  $\mu$ 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 1110018J18Rik gene expression knockdown using RT-PCR Primer: 1110018J18Rik (m)-PR: sc-108161-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.