

3110079O15Rik siRNA (m): sc-108914

BACKGROUND

3110079O15Rik is a 121 amino acid single-pass membrane protein that is encoded by a gene which maps to mouse chromosome 1. Mouse chromosome 1 houses over 1,500 genes, some of which encode proteins such as nuclear receptor coactivators, coatomer complex subunits, synaptotagmins and olfactory receptors. In mice, chromosome 1 is the site of several recombination hotspots, indicating that chromosome 1 may play an important role in genetic diversity. Defects in chromosome 1-localized genes are associated with a variety of conditions, including autoimmune myocarditis, lymphocyte cell death, catalepsy, infantile neuroaxonal dystrophy and lung carcinomas.

REFERENCES

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2. Matsushima, Y., et al. 2005. A new mouse model for infantile neuroaxonal dystrophy, inad mouse, maps to mouse chromosome 1. *Mamm. Genome* 16: 73-78.
3. Hollander, M.C., et al. 2005. Deletion of XPC leads to lung tumors in mice and is associated with early events in human lung carcinogenesis. *Proc. Natl. Acad. Sci. USA* 102: 13200-13205.
4. Katayama, S., et al. 2005. Antisense transcription in the mammalian transcriptome. *Science* 309: 1564-1566.
5. Hofstetter, J.R., et al. 2008. Characterization of the quantitative trait locus for haloperidol-induced catalepsy on distal mouse chromosome 1. *Genes Brain Behav.* 7: 214-223.
6. Paigen, K., et al. 2008. The recombinational anatomy of a mouse chromosome. *PLoS Genet.* 4: e1000119.
7. Ligons, D.L., et al. 2009. A locus on chromosome 1 promotes susceptibility of experimental autoimmune myocarditis and lymphocyte cell death. *Clin. Immunol.* 130: 74-82.

CHROMOSOMAL LOCATION

Genetic locus: 3110079O15Rik (mouse) mapping to 1 D.

PRODUCT

3110079O15Rik 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 3110079O15Rik shRNA Plasmid (m): sc-108914-SH and 3110079O15Rik shRNA (m) Lentiviral Particles: sc-108914-V as alternate gene silencing products.

For independent verification of 3110079O15Rik (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-108914A, sc-108914B and sc-108914C.

PROTOCOLS

See our web site at 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 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

3110079O15Rik siRNA (m) is recommended for the inhibition of 3110079O15Rik 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.

RESEARCH USE

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