

2200002D01Rik siRNA (m): sc-108610

BACKGROUND

2200002D01Rik is a 114 amino acid protein encoded by a gene that maps to mouse chromosome 7 B1. The human homolog of this protein, known as H2RSP (hepatocyte growth factor activator inhibitor type 2-related small protein), IMUP (immortalization up-regulated protein) or C19orf33, is a 106 amino acid protein that exists as two alternatively spliced isoforms. The gene that encodes H2RSP is made up of approximately 843 bases and maps to human chromosome 19q13.2. Consisting of around 63 million bases with more than 1,400 genes, chromosome 19 makes up over 2% of the human genome. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc α receptors. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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5. Le Meur, N., Martin, C., Saugier-Verber, P., Joly, G., Lemoine, F., Moiriot, H., Rossi, A., Bachy, B., Cabot, A., Joly, P. and Frebourg, T. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. *Eur. J. Hum. Genet.* 12: 415-418.
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CHROMOSOMAL LOCATION

Genetic locus: 2200002D01Rik (mouse) mapping to 7 B1.

PROTOCOLS

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

PRODUCT

2200002D01Rik 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see 2200002D01Rik shRNA Plasmid (m): sc-108610-SH and 2200002D01Rik shRNA (m) Lentiviral Particles: sc-108610-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 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

2200002D01Rik siRNA (m) is recommended for the inhibition of 2200002D01Rik 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 2200002D01Rik gene expression knockdown using RT-PCR Primer: 2200002D01Rik (m)-PR: sc-108610-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.