

2310010M20Rik siRNA (m): sc-108662

BACKGROUND

2310010M20Rik, also known as C3orf43 homolog, is a 200 amino acid single-pass membrane protein encoded by a gene that maps to mouse chromosome 16 B2. The human homolog of 2310010M20Rik is a 214 amino acid protein known as C3orf43. The gene that encodes C3orf43 consists of approximately 8,490 bases and maps to human chromosome 3q29. Chromosome 3 houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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3. Maho, A., et al. 1999. Mapping of the CXCR1, CX3CR1, CCBP2 and CCR9 genes to the CCR cluster within the 3p21.3 region of the human genome. *Cytogenet. Cell Genet.* 87: 265-268.
4. Robinson, P.N., et al. 2000. The molecular genetics of Marfan syndrome and related microfibrilopathies. *J. Med. Genet.* 37: 9-25.
5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
6. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
7. Pfeifer, G.P., et al. 2005. Methylation of the tumor suppressor gene RASSF1A in human tumors. *Biochemistry* 70: 576-583.
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CHROMOSOMAL LOCATION

Genetic locus: 2310010M20Rik (mouse) mapping to 16 B2.

PRODUCT

2310010M20Rik 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 2310010M20Rik shRNA Plasmid (m): sc-108662-SH and 2310010M20Rik shRNA (m) Lentiviral Particles: sc-108662-V as alternate gene silencing products.

For independent verification of 2310010M20Rik (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-108662A, sc-108662B and sc-108662C.

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

2310010M20Rik siRNA (m) is recommended for the inhibition of 2310010M20Rik 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 2310010M20Rik gene expression knockdown using RT-PCR Primer: 2310010M20Rik (m)-PR: sc-108662-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.

PROTOCOLS

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