SANTA CRUZ BIOTECHNOLOGY, INC.

2310022A10Rik siRNA (m): sc-108674

BACKGROUND

2310022A10Rik, an uncharacterized protein C19orf47 homolog, is a 413 amino acid protein. There are three isoforms due to splicing variants of this protein currently recognized. The gene which encodes 2310022A10Rik maps to mouse chromosome 7 A3. The 2310022A10Rik gene is conserved in chimpanzee, rhesus monkey, canine, bovine, rat, and zebrafish. There are two known phosphorylation sites at Serin 115 and Serine 269. 2310022A10Rik has been noted to interact with Forkhead box protein P3 (FOXP3), a probably transcription factor that plays a critical role in the control of immune responses.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: 2310022A10Rik (mouse) mapping to 7 A3.

PRODUCT

2310022A10Rik siRNA (m) is a pool of 2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see 2310022A10Rik shRNA Plasmid (m): sc-108674-SH and 2310022A10Rik shRNA (m) Lentiviral Particles: sc-108674-V as alternate gene silencing products.

For independent verification of 2310022A10Rik (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-108674A and sc-108674B.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

2310022A10Rik siRNA (m) is recommended for the inhibition of 2310022A10Rik 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.

GENE EXPRESSION MONITORING

C19orf47 (H-5): sc-393896 is recommended as a control antibody for monitoring of 2310022A10Rik gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor 2310022A10Rik gene expression knockdown using RT-PCR Primer: 2310022A10Rik (m)-PR: sc-108674-PR (20 µl). 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.