

Msi2 siRNA (m): sc-75835

BACKGROUND

Msi2 (musashi homolog 2), also known as MSI2H, is a 328 amino acid protein that localizes to the cytoplasm and contains 2 RRM (RNA recognition motif) domains. Expressed ubiquitously at low levels, Msi2 functions as an RNA binding protein that, by regulating the expression of target mRNAs, is thought to play a role in the proliferation and maintenance of stem cells within the central nervous system. Msi2 is subject to post-translational phosphorylation and is upregulated in response to brain injury, suggesting a role in healing and brain tissue regeneration. Chromosomal aberrations involving the Msi2 gene are associated with the progression of chronic myeloid leukemia. Multiple isoforms of Msi2 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Msi2 (mouse) mapping to 11 C.

PRODUCT

Msi2 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 Msi2 shRNA Plasmid (m): sc-75835-SH and Msi2 shRNA (m) Lentiviral Particles: sc-75835-V as alternate gene silencing products.

For independent verification of Msi2 (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-75835A, sc-75835B and sc-75835C.

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

Msi2 siRNA (m) is recommended for the inhibition of Msi2 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 Msi2 gene expression knockdown using RT-PCR Primer: Msi2 (m)-PR: sc-75835-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.