

## Midline-2 siRNA (m): sc-75785

### BACKGROUND

Midline-2 (Midline defect 2, tripartite motif-containing protein 1) is a 715 amino acid protein encoded by the human gene MID2. Midline-2 belongs to the TRIM/RBCC family and contains two B box-type zinc fingers, one B30.2/SPRY domain, one COS domain, one fibronectin type-III domain and one RING-type zinc finger. Midline-2 is a cytoplasmic protein found as a homodimer or heterodimer with Midline-1. It also interacts with IGBP1 (lymphocyte signaling protein A4). Dimerization is mediated by the tripartite motif (RBCC; RING- and B box-type zinc fingers and coiled coil domains) and microtubule association is dependent on the C-terminal B30.2 domain. Midline-2 is expressed at low levels in fetal kidney and lung, and in adult prostate, ovary and small intestine.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: Mid2 (mouse) mapping to X F1.

### RESEARCH USE

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

### PRODUCT

Midline-2 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Midline-2 shRNA Plasmid (m): sc-75785-SH and Midline-2 shRNA (m) Lentiviral Particles: sc-75785-V as alternate gene silencing products.

For independent verification of Midline-2 (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-75785A, sc-75785B and sc-75785C.

### 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

### APPLICATIONS

Midline-2 siRNA (m) is recommended for the inhibition of Midline-2 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  $\mu$ M in 66  $\mu$ 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 Midline-2 gene expression knockdown using RT-PCR Primer: Midline-2 (m)-PR: sc-75785-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.