

MAGE-G2 siRNA (m): sc-149224

BACKGROUND

MAGE-G2, also known as 1700020D05Rik, is a 294 amino acid mouse protein encoded by a gene that maps to mouse chromosome 19 A. MAGE-G2 is highly homologous to MAGE-G1 and may possess similar characteristics to those of necdin. While it is expressed in postmitotic neurons, necdin acts as a growth suppressor. It has been suggested that necdin and MAGE-G1 share common biochemical and functional features, and both are thought to act together in brain development. Necdin-homologous proteins, such as MAGE-G1 and MAGE-G2, may compensate for the absence of necdin expression in Prader-Willi syndrome and necdin knockout mice.

REFERENCES

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2. Nishimura, I., Shimizu, S., Sakoda, J.Y. and Yoshikawa, K. 2007. Expression of *Drosophila* MAGE gene encoding a necdin homologous protein in postembryonic neurogenesis. *Gene Expr. Patterns* 7: 244-251.
3. Chapman, E.J. and Knowles, M.A. 2009. Necdin: a multi functional protein with potential tumor suppressor role? *Mol. Carcinog.* 48: 975-981.
4. Yoshikawa, K. 2009. Regulation of neuronal development by the imprinted gene Necdin. *No To Hattatsu* 41: 214-218.
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CHROMOSOMAL LOCATION

Genetic locus: Scarb1 (mouse) mapping to 5 G1.1.

PRODUCT

MAGE-G2 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 MAGE-G2 shRNA Plasmid (m): sc-149224-SH and MAGE-G2 shRNA (m) Lentiviral Particles: sc-149224-V as alternate gene silencing products.

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.

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

MAGE-G2 siRNA (m) is recommended for the inhibition of MAGE-G2 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 MAGE-G2 gene expression knockdown using RT-PCR Primer: MAGE-G2 (m)-PR: sc-149224-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.