

MAGE-B18 siRNA (h): sc-91351

BACKGROUND

The melanoma-associated antigen (MAGE) family consists of a number of antigens recognized by cytotoxic T lymphocytes. The MAGE genes were initially isolated from different kinds of tumors and, based on their virtually exclusive tumor-specific expression in adult tissues, they have been used as targets for cancer immunotherapy. MAGE genes encode for tumor-rejection antigens that are expressed in tumors of different histologic types and in normal testis and placenta. MAGE-B18 (melanoma-associated antigen B18) is a 343 amino acid protein that contains one MAGE domain and may be involved in tumorigenesis. The gene encoding MAGE-B18 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes.

REFERENCES

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4. Sarantou, T., et al. 1997. Melanoma-associated antigens as messenger RNA detection markers for melanoma. *Cancer Res.* 57: 1371-1376.
5. Serrano, A., et al. 1999. Quantitative evaluation of the expression of MAGE genes in tumors by limiting dilution of cDNA libraries. *Int. J. Cancer* 83: 664-669.
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CHROMOSOMAL LOCATION

Genetic locus: MAGEB18 (human) mapping to Xp21.3.

PRODUCT

MAGE-B18 siRNA (h) 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 MAGE-B18 shRNA Plasmid (h): sc-91351-SH and MAGE-B18 shRNA (h) Lentiviral Particles: sc-91351-V as alternate gene silencing products.

For independent verification of MAGE-B18 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-91351A, sc-91351B and sc-91351C.

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-B18 siRNA (h) is recommended for the inhibition of MAGE-B18 expression in human 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-B18 gene expression knockdown using RT-PCR Primer: MAGE-B18 (h)-PR: sc-91351-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.