

# MAGE-D2 siRNA (m): sc-62582

## 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-D2 (melanoma-associated antigen D2), also known as BCG1 (breast cancer-associated gene 1), 11B6, HCA10 or JCL-1, is a 606 amino acid protein that contains one MAGE domain. Expressed throughout the body, MAGE-D2 is thought to function as a negative regulator of p53 (a potent tumor suppressor), possibly contributing to tumor formation and metastasis. Multiple isoforms of MAGE-D2 exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Maged2 (mouse) mapping to X F3.

## RESEARCH USE

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

## PROTOCOLS

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

## PRODUCT

MAGE-D2 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 MAGE-D2 shRNA Plasmid (m): sc-62582-SH and MAGE-D2 shRNA (m) Lentiviral Particles: sc-62582-V as alternate gene silencing products.

For independent verification of MAGE-D2 (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-62582A, sc-62582B and sc-62582C.

## 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

MAGE-D2 siRNA (m) is recommended for the inhibition of MAGE-D2 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 MAGE-D2 gene expression knockdown using RT-PCR Primer: MAGE-D2 (m)-PR: sc-62582-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.