SANTA CRUZ BIOTECHNOLOGY, INC.

MAGE-F1 siRNA (h): sc-78398

BACKGROUND

MAGE-F1 is a 308 amino acid melanoma associated protein. MAGE-F1 contains one MAGE domain and is ubiquitously expressed in adult and fetal tissues. The 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 are believed to encode tumor-rejection antigens and are usually expressed in tumors of different histologic types, but not in normal tissues, with the exception of testis and placenta. MAGE-F1, MAGE-D1, MAGE-D2/JCL-1 and NDN form a group of ubiquitously expressed antigens. This constantly expressed group of proteins suggests some MAGE gene products have a role in normal cell physiology.

REFERENCES

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4. Liu, B.B., Ye, S.L., He, P., Liu, Y.K. and Tang, Z.Y. 1999. MAGE-1 and related MAGE gene expression may be associated with hepatocellular carcinoma. J. Cancer Res. Clin. Oncol. 125: 685-689.
5. Ohman Forslund, K. and Nordqvist, K. 2001. The melanoma antigen genes—any clues to their functions in normal tissues? Exp. Cell Res. 265: 185-194.
6. Stone, B., Schummer, M., Paley, P.J., Crawford, M., Ford, M., Urban, N. and Nelson, B.H. 2001. MAGE-F1, a novel ubiquitously expressed member of the MAGE superfamily. Gene 267: 173-182.

CHROMOSOMAL LOCATION

Genetic locus: MAGEF1 (human) mapping to 3q27.1.

PRODUCT

MAGE-F1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MAGE-F1 shRNA Plasmid (h): sc-78398-SH and MAGE-F1 shRNA (h) Lentiviral Particles: sc-78398-V as alternate gene silencing products.

For independent verification of MAGE-F1 (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-78398A, sc-78398B and sc-78398C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

MAGE-F1 siRNA (h) is recommended for the inhibition of MAGE-F1 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 µM in 66 µl. 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-F1 gene expression knockdown using RT-PCR Primer: MAGE-F1 (h)-PR: sc-78398-PR (20 µl). 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.