



MAGE-B18 (S-13): sc-131178

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 testes 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

1. Graf, L.H. and Ferrone, S. 1989. Human melanoma-associated antigens. *Immunol. Ser.* 43: 643-679.
2. Merimsky, O., Shoenfeld, Y., Chaitchik, S., Yechezkel, G. and Fishman, P. 1994. Antigens and antibodies in malignant melanoma. *Tumour Biol.* 15: 188-202.
3. Rogner, U.C., Wilke, K., Steck, E., Korn, B. and Poustka, A. 1995. The melanoma antigen gene (MAGE) family is clustered in the chromosomal band Xq28. *Genomics* 29: 725-731.
4. Sarantou, T., Chi, D.D., Garrison, D.A., Conrad, A.J., Schmid, P., Morton, D.L. and Hoon, D.S. 1997. Melanoma-associated antigens as messenger RNA detection markers for melanoma. *Cancer Res.* 57: 1371-1376.
5. Serrano, A., Lethé, B., Delroisse, J.M., Lurquin, C., De Plaen, E., Brasseur, F., Rimoldi, D. and Boon, T. 1999. Quantitative evaluation of the expression of MAGE genes in tumors by limiting dilution of cDNA libraries. *Int. J. Cancer* 83: 664-669.
6. van Dinten, L.C., Pul, N., van Nieuwpoort, A.F., Out, C.J., Jager, M.J. and van den Elsen, P.J. 2005. Uveal and cutaneous melanoma: shared expression characteristics of melanoma-associated antigens. *Invest. Ophthalmol. Vis. Sci.* 46: 24-30.
7. Kasuga, C., Nakahara, Y., Ueda, S., Hawkins, C., Taylor, M.D., Smith, C.A. and Rutka, J.T. 2008. Expression of MAGE and GAGE genes in medulloblastoma and modulation of resistance to chemotherapy. *Laboratory investigation. J. Neurosurg. Pediatrics* 1: 305-313.
8. Tanaka, F., Haraguchi, N., Isikawa, K., Inoue, H. and Mori, M. 2008. Potential role of dendritic cell vaccination with MAGE peptides in gastrointestinal carcinomas. *Oncol. Rep.* 20: 1111-1116.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

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

SOURCE

MAGE-B18 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAGE-B18 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131178 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAGE-B18 (S-13) is recommended for detection of MAGE-B18 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other MAGE family members.

Suitable for use as control antibody for MAGE-B18 siRNA (h): sc-91351, MAGE-B18 shRNA Plasmid (h): sc-91351-SH and MAGE-B18 shRNA (h) Lentiviral Particles: sc-91351-V.

Molecular Weight of MAGE-B18: 39 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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