SANTA CRUZ BIOTECHNOLOGY, INC.

MAGE-H1 (H-21): sc-130813



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-H1 (melanoma-associated antigen H1), also known as restin or APR1 (apoptosis-related protein 1), is a 219 amino acid protein that contains a type II MAGE homology domain (MHD). Enhanced ligand stimulation promotes MAGE-H1 interaction with the type II death domain of NGFR p75. It is suggested that MAGE-H1 accelerates differentiation in response to nerve growth factor in cells.

REFERENCES

- De Plaen, E., Arden, K., Traversari, C., Gaforio, J.J., Szikora, J.P., De Smet, C., Brasseur, F., van der Bruggen, P., Lethe, B. and Lurquin, C. 1994. Structure, chromosomal localization, and expression of 12 genes of the MAGE family. Immunogenetics 40: 360-369.
- Lucas, S., Brasseur, F. and Boon, T. 1999. A new MAGE gene with ubiquitous expression does not code for known MAGE antigens recognized by T cells. Cancer Res. 59: 4100-4103.
- Serrano, A., Lethe, 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.
- Kobayashi, Y., Higashi, T., Nouso, K., Nakatsukasa, H., Ishizaki, M., Kaneyoshi, T., Toshikuni, N., Kariyama, K., Nakayama, E. and Tsuji, T. 2000. Expression of MAGE, GAGE and BAGE genes in human liver diseases: utility as molecular markers for hepatocellular carcinoma. J. Hepatol. 32: 612-617.
- Tcherpakov, M., Bronfman, F.C., Conticello, S.G., Vaskovsky, A., Levy, Z., Niinobe, M., Yoshikawa, K., Arenas, E. and Fainzilber, M. 2002. The p75 neurotrophin receptor interacts with multiple MAGE proteins. J. Biol. Chem. 277: 49101-49104.
- Barker, P.A. and Salehi, A. 2002. The MAGE proteins: emerging roles in cell cycle progression, apoptosis, and neurogenetic disease. J. Neurosci. Res. 67: 705-712.
- 7. Shao, J.B. and Chen, Z. 2003. Expression of MAGE, GAGE, and BAGE genes in human hepatocellular carcinoma. Zhonghua Gan Zang Bing Za Zhi 11: 142-144.
- 8. Albrecht, D.E. and Froehner, S.C. 2004. DAMAGE, a novel α -dystrobrevin-associated MAGE protein in dystrophin complexes. J. Biol. Chem. 279: 7014-7023.

STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: MAGEH1 (human) mapping to Xp11.21.

SOURCE

MAGE-H1 (H-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of MAGE-H1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MAGE-H1 (H-21) is recommended for detection of MAGE-H1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MAGE-H1 siRNA (h): sc-91276, MAGE-H1 shRNA Plasmid (h): sc-91276-SH and MAGE-H1 shRNA (h) Lentiviral Particles: sc-91276-V.

Molecular Weight of MAGE-H1: 24 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

DATA





MAGE-H1 (H-21): sc-130813. Western blot analysis of MAGE-H1 expression in Jurkat whole cell lysate.

MAGE-H1 (H-21): sc-130813. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization.

RESEARCH USE

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

PROTOCOLS

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