

MAGE-A1 (I-21): sc-130160

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 and are expressed in tumors of different histologic types, but not in normal tissues, with the exception of testis and placenta. Although a large number of MAGE genes have now been identified and extensively studied in tumors of various origin, their function in normal cells remains unknown.

REFERENCES

- Okami, J., Dohno, K., Sakon, M., Iwao, K., Yamada, T., Yamamoto, H., Fujiwara, Y., Nagano, H., Umeshita, K., Matsuura, N., Nakamori, S. and Monden, M. 2000. Genetic detection for micrometastasis in lymph node of biliary tract carcinoma. *Clin. Cancer Res.* 6: 2326-2332.
- Granelli, P., Siardi, C., Zennaro, F., Cattaneo, M., Malferrari, G., Buffa, R., Fociani, P., Fregoni, F., De Ruberto, F., Fichera, G., Peracchia, A. and Binno, I. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric and cardiac carcinomas. *Scand. J. Gastroenterol.* 35: 528-533.
- Klein, C., Bueler, H. and Mulligan, R.C. 2000. Comparative analysis of genetically modified dendritic cells and tumor cells as therapeutic cancer vaccines. *J. Exp. Med.* 191: 1699-1708.
- Busam, K.J., Iversen, K., Berwick, M., Spagnoli, G.C., Old, L.J. and Jungbluth, A.A. 2000. Immunoreactivity with the anti-MAGE antibody 57B in malignant melanoma: frequency of expression and correlation with prognostic parameters. *Mod. Pathol.* 13: 459-465.
- Kobayashi, Y., Higashi, T., Nouse, 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.
- Luiten, R. and van der Bruggen, P. 2000. A MAGE-A1 peptide is recognized on HLA-B7 human tumors by cytolytic T lymphocytes. *Tissue Antigens* 55: 149-152.
- Osterlund, C., Töhönen, V., Forslund, K.O. and Nordqvist, K. 2000. MAGE-B4, a novel melanoma antigen (MAGE) gene specifically expressed during germ cell differentiation. *Cancer Res.* 60: 1054- 1061.

CHROMOSOMAL LOCATION

Genetic locus: MAGEA1 (human) mapping to Xq28.

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.

SOURCE

MAGE-A1 (I-21) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MAGE-A1 of human origin.

PRODUCT

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

APPLICATIONS

MAGE-A1 (I-21) is recommended for detection of MAGE-A1 of human origin by 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-A1 siRNA (h): sc-37313, MAGE-A1 shRNA Plasmid (h): sc-37313-SH and MAGE-A1 shRNA (h) Lentiviral Particles: sc-37313-V.

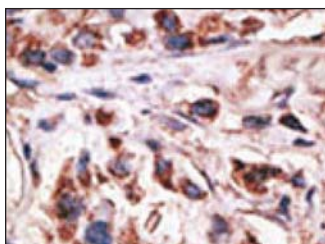
Molecular Weight of MAGE-A1: 46 kDa.

Positive Controls: A-375 cell lysate: sc-3811, SK-MEL-28 cell lysate: sc-2236 or U-87 MG cell lysate: sc-2411.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 2) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



MAGE-A1 (I-21): sc-130160. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

RESEARCH USE

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