MAGE (E-8): sc-393083



The Power to Question

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.
- 2. Granelli, P., Siardi, C., Zennaro, F., Cattaneo, M., Malferrari, G., Buffa, R., Fociani, P., Fregoni, F., De Ruberto, F., Fichera, G., Peracchia, A. and Biunno, I. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric andcardial carcinomas. Scand. J. Gastroenterol. 35: 528-533.
- 3. 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., 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.
- 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.

SOURCE

MAGE (E-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 209-242 within an internal region of MAGE-A1 of human origin.

PRODUCT

Each vial contains 200 μg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-393083 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

MAGE (E-8) is recommended for detection of MAGE isoforms of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

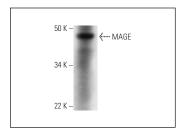
Molecular Weight of MAGE: 34 kDa.

Positive Controls: Hs 294T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MAGE (E-8): sc-393083. Western blot analysis of MAGE expression in Hs 294T whole cell lysate.

STORAGE

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

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com