

MAGE-A3/6 (G-23): sc-130810

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

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- Klein, C., et al. 2000. Comparative analysis of genetically modified dendritic cells and tumor cells as therapeutic cancer vaccines. *J. Exp. Med.* 191: 1699-1708.
- Busam, K.J., et al. 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., et al. 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., et al. 2000. A MAGE-A1 peptide is recognized on HLA-B7 human tumors by cytolytic T lymphocytes. *Tissue Antigens* 55: 149-152.
- Osterlund, C., et al. 2000. Mage-B4, a novel melanoma antigen (MAGE) gene specifically expressed during germ cell differentiation. *Cancer Res.* 60: 1054-1061.

CHROMOSOMAL LOCATION

Genetic locus: MAGEA3/MAGEA6 (human) mapping to Xq28.

SOURCE

MAGE-A3/6 (G-23) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of MAGE-A6 of human origin.

PRODUCT

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

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.

APPLICATIONS

MAGE-A3/6 (G-23) is recommended for detection of MAGE-A3 and MAGE-A6 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MAGE-A3/6 siRNA (h): sc-45284, MAGE-A3/6 shRNA Plasmid (h): sc-45284-SH and MAGE-A3/6 shRNA (h) Lentiviral Particles: sc-45284-V.

Molecular Weight of MAGE-A1/2/3/4/6/12: 45-50 kDa.

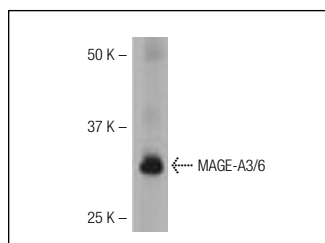
Molecular Weight of MAGE-10: 72 kDa.

Positive Controls: A549 cell lysate: sc-2413.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



MAGE-A3/6 (G-23): sc-130810. Western blot analysis of MAGE-A3/6 expression in A549 whole cell lysate.

SELECT PRODUCT CITATIONS

- Batchu, R.B., et al. 2014. Efficient lysis of epithelial ovarian cancer cells by MAGE-A3-induced cytotoxic T lymphocytes using rAAV-6 capsid mutant vector. *Vaccine* 32: 938-943.

PROTOCOLS

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