

MAGE-B16 (R-16): sc-324923

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. MAGE-B16 (melanoma-associated antigen B16) is a 363 amino acid protein that contains one MAGE domain.

REFERENCES

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- Granelli, P., et al. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric and cardiac carcinomas. *Scand. J. Gastroenterol.* 35: 528-533.
- 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: *Mageb16* (rat) mapping to Xq22.

SOURCE

MAGE-B16 (R-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MAGE-B16 of rat 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-324923 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAGE-B16 (R-16) is recommended for detection of MAGE-B16 of rat 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-B family members.

Molecular Weight of MAGE-B16: 41 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.

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 or our catalog for detailed protocols and support products.