SANTA CRUZ BIOTECHNOLOGY, INC.

MAGE (F-4): sc-390509

SANTA CRUZ BIOTECHNOLOGY

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

1. Okami, J., et al. 2000. Genetic detection for micrometastasis in lymph node of biliary tract carcinoma. Clin. Cancer Res. 6: 2326-2332.
2. Granelli, P., et al. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric andcardial carcinomas. Scand. J. Gastroenterol. 35: 528-533.
3. 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.
4. 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.
5. 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.
6. 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.

SOURCE

MAGE (F-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 203-239 within an internal region of MAGE-A1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAGE (F-4) is available conjugated to agarose (sc-390509 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390509 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390509 PE), fluorescein (sc-390509 FITC), Alexa Fluor® 488 (sc-390509 AF488), Alexa Fluor® 546 (sc-390509 AF546), Alexa Fluor® 594 (sc-390509 AF594) or Alexa Fluor® 647 (sc-390509 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390509 AF680) or Alexa Fluor® 790 (sc-390509 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390509 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

MAGE (F-4) is recommended for detection of MAGE isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

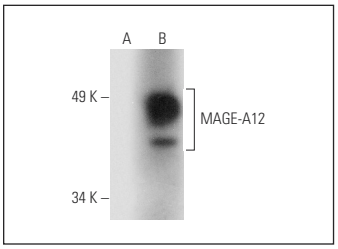
Molecular Weight of MAGE: 34 kDa.

Positive Controls: MAGE-A12 (h): 293 Lysate: sc-110824 or RAW 264.7 whole cell lysate: sc-2211.

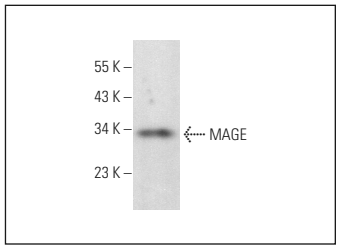
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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 (F-4): sc-390509. Western blot analysis of MAGE expression in non-transfected: sc-110760 (**A**) and human MAGE-A12 transfected: sc-110824 (**B**) 293 whole cell lysates.



MAGE (F-4): sc-390509. Western blot analysis of MAGE expression in RAW 264.7 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.