# MAGE (A-16): sc-31321



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.
- Granelli, P., et al. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric and cardial 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.
- 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.
- 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.
- 7. Osterlund, C., et al. 2000. MAGE-B4, a novel melanoma antigen (MAGE) gene specifically expressed during germ cell differentiation. Cancer Res. 60: 1054-1061.

#### **SOURCE**

MAGE (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAGE-A1 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31321 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **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.

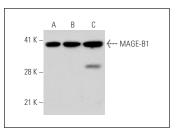
#### **APPLICATIONS**

MAGE (A-16) is recommended for detection of a broad range of MAGE family members of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immuno fluorescence (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).

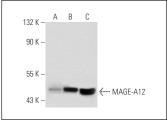
Molecular Weight of MAGE famliy members: 34-46 kDa.

Positive Controls: MAGE-A12 (h): 293 Lysate: sc-110824, SK-MEL-28 cell lysate: sc-2236 or A-375 cell lysate: sc-3811.

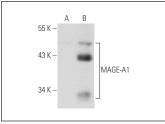
#### **DATA**



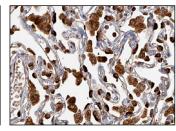
MAGE (A-16): sc-31321. Western blot analysis of MAGE-B1 expression in non-transfected 293T: sc-117752 (A), human MAGE-B1 transfected 293T: sc-113270 (B) and A-673 (C) whole cell lysates.



MAGE (A-16): sc-31321. Western blot analysis of MAGE-A12 expression in non-transfected 293T: sc-117752 (**A**), human MAGE-A12 transfected 293T: sc-175999 (**B**) and A-375 (**C**) whole cell lysates.



MAGE (A-16): sc-31321. Western blot analysis of MAGE-A1 expression in non-transfected: sc-110760 (**A**) and human MAGE-A1 transfected: sc-112260 (**B**) 293



MAGE (A-16): sc-31321. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic staining of macrophages and pneumocytes at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

# **PROTOCOLS**

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



Try **MAGE (6A111):** sc-71537 or **MAGE (B-5):** sc-365150, our highly recommended monoclonal alternatives to MAGE (A-16).