

MAGE-C1 (E-5): sc-377493



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. 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. Also referred to as CT7, MAGE-C1 is a member of the MAGE family that is expressed in multiple myeloma and that correlates with plasma-cell proliferation.

REFERENCES

- 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 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: MAGEC1 (human) mapping to Xq27.2.

SOURCE

MAGE-C1 (E-5) is a mouse monoclonal antibody raised against amino acids 1-175 mapping at the N-terminus of MAGE-C1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of 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.

APPLICATIONS

MAGE-C1 (E-5) is recommended for detection of MAGE-C1 of 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), 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).

Suitable for use as control antibody for MAGE-C1 siRNA (h): sc-62579, MAGE-C1 shRNA Plasmid (h): sc-62579-SH and MAGE-C1 shRNA (h) Lentiviral Particles: sc-62579-V.

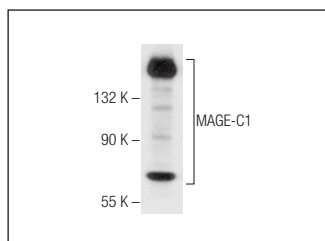
Molecular Weight of MAGE-C1: 124 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, JEG-3 whole cell lysate: sc-364255 or U-87 MG cell lysate: sc-2411.

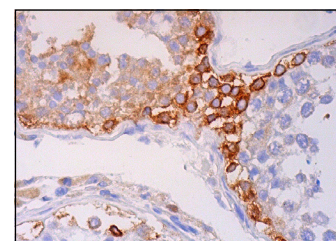
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



MAGE-C1 (E-5): sc-377493. Western blot analysis of MAGE-C1 expression in U266 nuclear extract.



MAGE-C1 (E-5): sc-377493. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **MAGE-C1 (CT7-33): sc-53868** for MAGE-C1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.