

MAGE-A1 (3F256): sc-71539

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

- Okami, J., et al. 2000. Genetic detection for micrometastasis in lymph node of biliary tract carcinoma. *Clin. Cancer Res.* 6: 2326-2332.
- Graneli, 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.

CHROMOSOMAL LOCATION

Genetic locus: MAGEA1 (human) mapping to Xq28; Magea1 (mouse) mapping to X F3.

SOURCE

MAGE-A1 (3F256) is a mouse monoclonal antibody raised against partially purified, full length recombinant MAGE-A1 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.

APPLICATIONS

MAGE-A1 (3F256) is recommended for detection of MAGE-A1 of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for MAGE-A1 siRNA (h): sc-37313, MAGE-A siRNA (m): sc-35844, MAGE-A1 shRNA Plasmid (h): sc-37313-SH, MAGE-A shRNA Plasmid (m): sc-35844-SH, MAGE-A1 shRNA (h) Lentiviral Particles: sc-37313-V and MAGE-A shRNA (m) Lentiviral Particles: sc-35844-V.

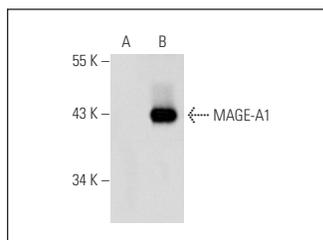
Molecular Weight of MAGE-A1: 46 kDa.

Positive Controls: A-375 cell lysate: sc-3811, SK-MEL-28 cell lysate: sc-2236 or MAGE-A1 (h2): 293T Lysate: sc-159131.

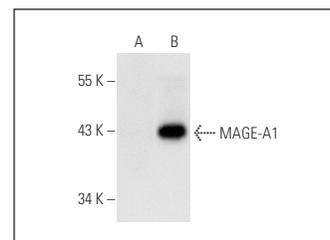
RECOMMENDED SUPPORT REAGENTS

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-A1 (3F256): sc-71539. Western blot analysis of MAGE-A1 expression in non-transfected: sc-110760 (A) and human MAGE-A1 transfected: sc-112260 (B) 293 whole cell lysates.



MAGE-A1 (3F256): sc-71539. Western blot analysis of MAGE-A1 expression in non-transfected: sc-117752 (A) and human MAGE-A1 transfected: sc-159131 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Terra, L.F., et al. 2013. Proteins differentially expressed in human β-cells-enriched pancreatic islet cultures and human Insulinomas. *Mol. Cell. Endocrinol.* 381: 16-25.
- Wang, D., et al. 2016. MAGE-A1 promotes melanoma proliferation and migration through c-Jun activation. *Biochem. Biophys. Res. Commun.* 473: 959-965.

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.



See **MAGE-A (6C1): sc-20034** for MAGE-A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.