

MAGE-A2 (N-18): sc-130164

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 and in normal testes and placenta. MAGE-A2 (melanoma antigen family A2), also known as MAGE2, MAGEA2A or CT1.2 (cancer/testis antigen 1.2), is a 314 amino acid protein that contains one MAGE domain. Expressed in a variety of carcinomas, including melanoma, breast cancer, lung cancer and neck and head squamous cell carcinoma, MAGE-A2 is thought to play a role in embryonic development and tumor transformation/progression. Like all members of the MAGE family, MAGE-A2 is a cancer-associated antigen that is a potential target for cancer therapy. MAGE-A2 is expressed as multiple isoforms due to alternative splicing events.

REFERENCES

1. van der Bruggen, P., et al. 1991. A gene encoding an antigen recognized by cytolytic T lymphocytes on a human melanoma. *Science* 254: 1643-1647.
2. Zakut, R., et al. 1993. Differential expression of MAGE-1, -2, and -3 messenger RNA in transformed and normal human cell lines. *Cancer Res.* 53: 5-8.
3. De Smet, C., et al. 1994. Sequence and expression pattern of the human MAGE2 gene. *Immunogenetics* 39: 121-129.
4. De Plaen, E., et al. 1994. Structure, chromosomal localization, and expression of 12 genes of the MAGE family. *Immunogenetics* 40: 360-369.
5. Rogner, U.C., et al. 1995. The melanoma antigen gene (MAGE) family is clustered in the chromosomal band Xq28. *Genomics* 29: 725-731.

CHROMOSOMAL LOCATION

Genetic locus: MAGEA2 (human) mapping to Xq28.

SOURCE

MAGE-A2 (N-18) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MAGE-A2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

PROTOCOLS

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

APPLICATIONS

MAGE-A2 (N-18) is recommended for detection of MAGE-A2 of 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), 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-A2 siRNA (h): sc-108018, MAGE-A2 shRNA Plasmid (h): sc-108018-SH and MAGE-A2 shRNA (h) Lentiviral Particles: sc-108018-V.

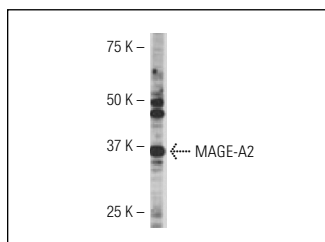
Molecular Weight of MAGE-A2: 35 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



MAGE-A2 (133AT1218): sc-130164. Western blot analysis of MAGE-A2 expression in HL60 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **MAGE-A (6C1): sc-20034** or **MAGE-A (A-1): sc-515687**, our highly recommended monoclonal alternatives to MAGE-A2 (N-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **MAGE-A (6C1): sc-20034**.