SANTA CRUZ BIOTECHNOLOGY, INC.

MAGE-H1 (F-12): sc-131594



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 that are expressed in tumors of different histologic types and in normal testis and placenta. MAGE-H1 (melanoma-associated antigen H1), also known as Restin or APR1 (apoptosis-related protein 1), is a 219 amino acid protein that contains a type II MAGE homology domain (MHD). Enhanced ligand stimulation promotes MAGE-H1 interaction with the type II death domain of NGFR p75. It is suggested that MAGE-H1 accelerates differentiation in response to nerve growth factor in cells.

REFERENCES

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- Lucas, S., et al. 1999. A new MAGE gene with ubiquitous expression does not code for known MAGE antigens recognized by T cells. Cancer Res. 59: 4100-4103.
- Serrano, A., et al. 1999. Quantitative evaluation of the expression of MAGE genes in tumors by limiting dilution of cDNA libraries. Int. J. Cancer 83: 664-669.
- 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.
- 5. Tcherpakov, M., et al. 2002. The p75 neurotrophin receptor interacts with multiple MAGE proteins. J. Biol. Chem. 277: 49101-49104.
- Barker, P.A., et al. 2002. The MAGE proteins: emerging roles in cell cycle progression, apoptosis, and neurogenetic disease. J. Neurosci. Res. 67: 705-712.
- 7. Shao, J.B., et al. 2003. Expression of MAGE, GAGE, and BAGE genes in human hepatocellular carcinoma. Zhonghua Gan Zang Bing Za Zhi 11: 142-144.

CHROMOSOMAL LOCATION

Genetic locus: MAGEH1 (human) mapping to Xp11.21; Mageh1 (mouse) mapping to X F3.

SOURCE

MAGE-H1 (F-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAGE-H1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131594 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAGE-H1 (F-12) is recommended for detection of MAGE-H1 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other MAGE family members.

MAGE-H1 (F-12) is also recommended for detection of MAGE-H1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MAGE-H1 siRNA (h): sc-91276, MAGE-H1 siRNA (m): sc-149225, MAGE-H1 shRNA Plasmid (h): sc-91276-SH, MAGE-H1 shRNA Plasmid (m): sc-149225-SH, MAGE-H1 shRNA (h) Lentiviral Particles: sc-91276-V and MAGE-H1 shRNA (m) Lentiviral Particles: sc-149225-V.

Molecular Weight of MAGE-H1: 24 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or MAGE-H1 (h): 293T Lysate: sc-159163.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



MAGE-H1 (F-12): sc-131594. Western blot analysis of MAGE-H1 expression in non-transfected: sc-117752 (**A**) and human MAGE-H1 transfected: sc-159163 (**B**) 293T whole cell lysates.

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.