

MAGE-A4 (H-32): sc-292429

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. Malignant neoplasms have been shown to express MAGE genes, notably MAGE-A4. Expression correlates significantly with poorly differentiated tumors of cervical lineage, and while MAGE-A4 localizes to the nucleus in well-differentiated tumors, it occupies both the nucleus and cytoplasm of poorly differentiated cancer cells. Expression of MAGE-4 is not limited to cervical carcinoma; more than 50 percent of carcinomas of the esophagus, head and neck, lung, and bladder also express MAGE-A4, where it prompts cytolytic T lymphocyte targeting, suggesting it may serve as a target for antitumoral vaccination.

REFERENCES

1. Aubry, F., et al. 2001. MAGE-A4, a germ cell specific marker, is expressed differentially in testicular tumors. *Cancer* 92: 2778-2785.
2. Zhang, Y., et al. 2002. A MAGE-A4 peptide presented by HLA-B37 is recognized on human tumors by cytolytic T lymphocytes. *Tissue Antigens* 60: 365-371.

CHROMOSOMAL LOCATION

Genetic locus: MAGEA4 (human) mapping to Xq28.

SOURCE

MAGE-A4 (H-32) is a rabbit polyclonal antibody raised against amino acids 286-317 mapping at the C-terminus of MAGE-A4 of human origin.

PRODUCT

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

APPLICATIONS

MAGE-A4 (H-32) is recommended for detection of MAGE-A4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MAGE-A4 siRNA (h): sc-45955, MAGE-A4 shRNA Plasmid (h): sc-45955-SH and MAGE-A4 shRNA (h) Lentiviral Particles: sc-45955-V.

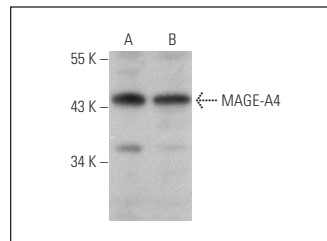
Molecular Weight of MAGE-A4: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NCI-H1299 whole cell lysate: sc-364234 or U266 whole cell lysate: sc-364800.

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.

DATA



MAGE-A4 (H-32): sc-292429. Western blot analysis of MAGE-A4 expression in NCI-H1299 (A) and U266 (B) 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.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **MAGE-A (6C1): sc-20034**, our highly recommended monoclonal alternative to MAGE-A4 (H-32). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **MAGE-A (6C1): sc-20034**.