# SANTA CRUZ BIOTECHNOLOGY, INC.

# MAGE-A8 (T-14): sc-132331



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. MAGE-A8 appears to be overexpressed in a majority of human bladder carcinomas.

## REFERENCES

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- 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.
- Bar-Haim, E., et al. 2004. MAGE-A8 overexpression in transitional cell carcinoma of the bladder: identification of two tumour-associated antigen peptides. Br. J. Cancer 91: 398-407.

## CHROMOSOMAL LOCATION

Genetic locus: MAGEA8 (human) mapping to Xq28.

## SOURCE

MAGE-A8 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAGE-A8 of human origin.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132331 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

MAGE-A8 (T-14) is recommended for detection of MAGE-A8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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-A family members.

Suitable for use as control antibody for MAGE-A8 siRNA (h): sc-108014, MAGE-A8 shRNA Plasmid (h): sc-108014-SH and MAGE-A8 shRNA (h) Lentiviral Particles: sc-108014-V.

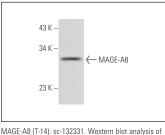
Molecular Weight of MAGE-A8: 25 kDa.

Positive Controls: human spleen extract: sc-363779.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



MAGE-A8 expression in human spleen tissue extract

#### **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.