# MAGE-A10 (Q-19): sc-324909



The Power to Question

## **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-A10 (melanoma antigen family A, 10), also known as MAGE10 or CT1.10 (cancer/testis antigen 1.10), is a 369 amino acid protein that contains one MAGE domain and is thought to play a role in embryonic development and tumor progression. Like other members of the MAGE family, MAGE-A10 is expressed in head and neck squamous cell carcinoma, melanoma, breast cancer and lung cancer, suggesting that MAGE-A10 plays an important role in carcinogenesis.

## **REFERENCES**

- De Plaen, E., Arden, K., Traversari, C., Gaforio, J.J., Szikora, J.P., De Smet, C., Brasseur, F., van der Bruggen, P., Lethe, B. and Lurquin, C. 1994. Structure, chromosomal localization, and expression of 12 genes of the MAGE family. Immunogenetics 40: 360-369.
- Rogner, U.C., Wilke, K., Steck, E., Korn, B. and Poustka, A. 1995. The melanoma antigen gene (MAGE) family is clustered in the chromosomal band Xq28. Genomics 29: 725-731.
- 3. Rimoldi, D., Salvi, S., Reed, D., Coulie, P., Jongeneel, V.C., De Plaen, E., Brasseur, F., Rodriguez, A.M., Boon, T. and Cerottini, J.C. 1999. cDNA and protein characterization of human MAGE-10. Int. J. Cancer 82: 901-907.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300343. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Lin, J., Lin, L., Thomas, D.G., Greenson, J.K., Giordano, T.J., Robinson, G.S., Barve, R.A., Weishaar, F.A., Taylor, J.M., Orringer, M.B. and Beer, D.G. 2004. Melanoma-associated antigens in esophageal adenocarcinoma: identification of novel MAGE-A10 splice variants. Clin. Cancer Res. 10: 5708-5716.
- Taylor, M., Bolton, L.M., Johnson, P., Elliott, T. and Murray, N. 2007. Breast cancer is a promising target for vaccination using cancer-testis antigens known to elicit immune responses. Breast Cancer Res. 9: R46.
- Andrade, V.C., Vettore, A.L., Felix, R.S., Almeida, M.S., Carvalho, F., Oliveira, J.S., Chauffaille, M.L., Andriolo, A., Caballero, O.L., Zago, M.A. and Colleoni, G.W. 2008. Prognostic impact of cancer/testis antigen expression in advanced stage multiple myeloma patients. Cancer Immun. 8: 2.
- 8. Sartorius, R., Pisu, P., D'Apice, L., Pizzella, L., Romano, C., Cortese, G., Giorgini, A., Santoni, A., Velotti, F. and De Berardinis, P. 2008. The use of filamentous bacteriophage fd to deliver MAGE-A10 or MAGE-A3 HLA-A2-restricted peptides and to induce strong antitumor CTL responses.

  J. Immunol. 180: 3719-3728.

# **STORAGE**

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

#### **CHROMOSOMAL LOCATION**

Genetic locus: Magea10 (mouse) mapping to X A7.3.

#### **SOURCE**

MAGE-A10 (Q-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAGE-A10 of mouse origin.

## **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-324909 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

MAGE-A10 (Q-19) is recommended for detection of MAGE-A10 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-A10 siRNA (m): sc-149216, MAGE-A10 shRNA Plasmid (m): sc-149216-SH and MAGE-A10 shRNA (m) Lentiviral Particles: sc-149216-V.

Molecular Weight of MAGE-A10: 41 kDa.

#### **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) 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.

#### **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.



Try MAGE-A (6C1): sc-20034, our highly recommended monoclonal alternative to MAGE-A10 (Q-19). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see MAGE-A (6C1): sc-20034.