# PRAME like-4/5 (D-18): sc-68730



The Power to Question

### **BACKGROUND**

Several tumor-associated antigen families, such as MAGE, GAGE, PRAME and BAGE, are of particular interest in tumor immunology because their expression, with the exception of testis and fetal tissues, seems to be restricted to tumor cells. The MAGE, BAGE and GAGE genes code for distinct antigens that are recognized by autologous cytolytic T lymphocytes. Many of these antigens represent suitable targets for tumor immunotherapy, since their expression in human melanoma cells is common and highly specific. PRAME (preferentially expressed antigen of melanoma) is a melanoma antigen recognized by cytotoxic T cells (CTLs) and is expressed in a variety of cancer cells, including leukemic cells. The PRAME gene is expressed at a high level in a very large fraction of tumors, such as melanomas, non small-cell lung carcinomas, sarcomas, head and neck tumors and renal carcinomas. Therefore, PRAME is a candidate for tumor immunotherapy, even though it is expressed at low levels in certain normal tissues.

# REFERENCES

- Li, J., Yang, Y., Fujie, T., Baba, K., Ueo, H., Mori and M., Akiyoshi, T. 1996.
  Expression of BAGE, GAGE, and MAGE genes in human gastric carcinoma.
  Clin. Cancer Res. 2: 1619-1625.
- Kirkin, A.F., Dzhandzhugazyan and K., Zeuthen, J. 1998. Melanoma-associated antigens recognized by cytotoxic T lymphocytes. APMIS. 106: 665-679.
- van Baren, N., Chambost, H., Ferrant, A., Michaux, L., Ikeda, H., Millard, I., Olive, D., Boon and T., Coulie, P.G. 1998. PRAME, a gene encoding an antigen recognized on a human melanoma by cytolytic T cells, is expressed in acute leukaemia cells. Br. J. Haematol. 102: 1376-1379.
- 4. Dalerba, P., Ricci, A., Russo, V., Rigatti, D., Nicotra, M.R., Mottolese, M., Bordignon, C., Natali and P.G., Traversari, C. 1998. High homogeneity of MAGE, BAGE, GAGE, tyrosinase and Melan-A/MART-1 gene expression in clusters of multiple simultaneous metastases of human melanoma: implications for protocol design of therapeutic antigen-specific vaccination strategies. Int. J. Cancer. 77: 200-204.
- 5. Põld, M., Zhou, J., Chen, G.L., Hall, J.M., Vescio and R.A., Berenson, J.R. 1999. Identification of a new, unorthodox member of the MAGE gene family. Genomics 59: 161-167.
- Matsushita, M., Ikeda, H., Kizaki, M., Okamoto, S., Ogasawara, M., Ikeda and Y., Kawakami, Y. 2001. Quantitative monitoring of the PRAME gene for the detection of minimal residual disease in leukaemia. Br. J. Haematol. 112: 916-926.
- Bortvin, A., Eggan, K., Skaletsky, H., Akutsu, H., Berry, D.L., Yanagimachi, R., Page and D.C., Jaenisch, R. 2003. Incomplete reactivation of Oct4-related genes in mouse embryos cloned from somatic nuclei. Development 130: 1673-1680.
- 8. Matsushita, M., Yamazaki, R., Ikeda and H., Kawakami, Y. 2003. Preferentially expressed antigen of melanoma (PRAME) in the development of diagnostic and therapeutic methods for hematological malignancies. Leuk. Lymphoma. 44: 439-444.

#### **CHROMOSOMAL LOCATION**

Genetic locus: Pramel4 (mouse) mapping to 4 E1.

#### **SOURCE**

PRAME like-4/5 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRAME like-4 of mouse origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-68730 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

PRAME like-4/5 (D-18) is recommended for detection of PRAME like-4 of mouse 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).

Molecular Weight of PRAME like-4/5: 63 kDa.

# **RECOMMENDED SECONDARY REAGENTS**

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

#### **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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scht.com