# PRAMEF3 (C-18): sc-69314



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, M. and Akiyoshi, T. 1996.
  Expression of BAGE, GAGE, and MAGE genes in human gastric carcinoma. Clin. Cancer Res. 2: 1619-1625.
- van Baren, N., Chambost, H., Ferrant, A., Michaux, L., Ikeda, H., Millard, I., Olive, D., Boon, T. and 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.
- 3. Dalerba, P., Ricci, A., Russo, V., Rigatti, D., Nicotra, M.R., Mottolese, M., Bordignon, C., Natali, P.G. and 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.
- Pold, M., Zhou, J., Chen, G.L., Hall, J.M., Vescio, R.A. and 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, Y. and Kawakami, Y. 2001. Quantitative monitoring of the PRAME gene for the detection of minimal residual disease in leukaemia. Br. J. Haematol. 112: 916-926.
- Murphy, R., Baptista, J., Holly, J., Umpleby, A.M., Ellard, S., Harries, L.W., Crolla, J., Cundy and T., Hattersley, A.T. 2008. Severe intrauterine growth retardation and atypical diabetes associated with a translocation breakpoint disrupting regulation of the Insulin-like growth factor 2 gene. J. Clin. Endocrinol. Metab. 93: 4373-4380.
- 7. Stansfield, W.E., Charles, P.C., Tang, R.H., Rojas, M., Bhati, R., Moss, N.C., Patterson and C., Selzman, C.H. 2009. Regression of pressure-induced left ventricular hypertrophy is characterized by a distinct gene expression profile. J. Thorac. Cardiovasc. Surg. 137: 232-238, 238e1

## **STORAGE**

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

### **SOURCE**

PRAMEF3 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRAMEF3 of human 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-69314 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

PRAMEF3 (C-18) is recommended for detection of PRAMEF3, PRAMEF18, PRAMEF19, and PRAMEF22 of human 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).

Suitable for use as control antibody for PRAMEF3 siRNA (h): sc-76225, PRAMEF3 shRNA Plasmid (h): sc-76225-SH and PRAMEF3 shRNA (h) Lentiviral Particles: sc-76225-V.

Molecular Weight of PRAMEF3: 55 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) 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.

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