SANTA CRUZ BIOTECHNOLOGY, INC.

PRAME (C-16): sc-19081

SANTA CRUZ BIOTECHNOLOGY

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 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

1. Li, J., et al. 1996. Expression of BAGE, GAGE, and MAGE genes in human gastric carcinoma. Clin. Cancer Res. 2: 1619-1625.
2. Dalerba, P., et al. 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.
3. van Baren, N., et al. 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. Pold, M., et al. 1999. Identification of a new, unorthodox member of the MAGE gene family. Genomics 59: 161-167.
5. Matsushita, M., et al. 2001. Quantitative monitoring of the PRAME gene for the detection of minimal residual disease in leukaemia. Br. J. Haematol. 112: 916-926.

CHROMOSOMAL LOCATION

Genetic locus: PRAME (human) mapping to 22q11.22.

SOURCE

PRAME (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PRAME 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.

Blocking peptide available for competition studies, sc-19081 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PRAME (C-16) is recommended for detection of PRAME 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).

PRAME (C-16) is also recommended for detection of PRAME in additional species, including canine and bovine.

Suitable for use as control antibody for PRAME siRNA (h): sc-37322, PRAME shRNA Plasmid (h): sc-37322-SH and PRAME shRNA (h) Lentiviral Particles: sc-37322-V.

Molecular Weight of PRAME: 58 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.