

PRAME (H-10): sc-137188

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.

CHROMOSOMAL LOCATION

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

SOURCE

PRAME (H-10) is a mouse monoclonal antibody raised against amino acids 126-205 mapping within an internal region of PRAME of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PRAME (H-10) is available conjugated to agarose (sc-137188 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137188 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137188 PE), fluorescein (sc-137188 FITC), Alexa Fluor® 488 (sc-137188 AF488), Alexa Fluor® 546 (sc-137188 AF546), Alexa Fluor® 594 (sc-137188 AF594) or Alexa Fluor® 647 (sc-137188 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137188 AF680) or Alexa Fluor® 790 (sc-137188 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PRAME (H-10) is recommended for detection of PRAME of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

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.

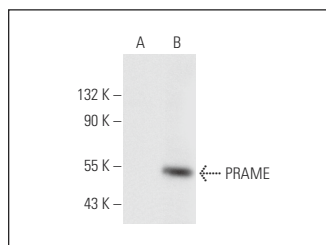
Positive Controls: PRAME (h): 293T Lysate: sc-115478 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SUPPORT REAGENTS

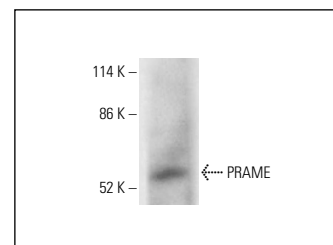
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PRAME (H-10): sc-137188. Western blot analysis of PRAME expression in non-transfected: sc-117752 (A) and human PRAME transfected: sc-115478 (B) 293T whole cell lysates.



PRAME (H-10): sc-137188. Western blot analysis of PRAME expression in MCF7 whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Altwater, B., et al. 2012. Activated human γδ T cells induce peptide-specific CD8+ T-cell responses to tumor-associated self-antigens. *Cancer Immunol. Immunother.* 61: 385-396.
2. Nettersheim, D., et al. 2016. The cancer/testis-antigen PRAME supports the pluripotency network and represses somatic and germ cell differentiation programs in seminomas. *Br. J. Cancer* 115: 454-464.
3. Lee, Y.K., et al. 2017. Tumor antigen PRAME is up-regulated by MZF1 in cooperation with DNA hypomethylation in melanoma cells. *Cancer Lett.* 403: 144-151.
4. Nettersheim, D., et al. 2019. Tcam-2 cells deficient for SOX2 and FOXA2 are blocked in differentiation and maintain a seminoma-like cell fate *in vivo*. *Cancers* 11: 728.
5. Wang, W.L., et al. 2021. RNA expression profiling reveals PRAME, a potential immunotherapy target, is frequently expressed in solitary fibrous tumors. *Mod. Pathol.* 34: 951-960.

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.