SANTA CRUZ BIOTECHNOLOGY, INC.

Pmel17 (H-300): sc-33590

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cytotoxic T lymphocytes (CTLs) recognize melanoma-associated antigens, which belong to three main groups. These groups include tumor-associated testis-specific antigens, melanocyte differentiation antigens and mutated or aberrantly expressed antigens, which are routinely used as markers to identify melanomas based on their binding to specific monoclonal antibodies. gp100, also designated ME20-M, ME20-S and PMEL 17, is classified as a melanocyte differentiation antigen and is expressed at low levels in normal cell lines and tissues, but is upregulated in melanocytes. gp100 is a highly glycosylated protein. It is also the product of proteolytic cleavage, which results in a secreted protein. gp100 is recognized by several monoclonal anti-bodies, including NKI-beteb, HMB-50 and HMB-45, which are used to diagnose melanomas. Therefore, gp100 is considered a potential target for immunotherapy of malignant melanoma.

CHROMOSOMAL LOCATION

Genetic locus: SILV (human) mapping to 12q13.2; Si (mouse) mapping to 10 D3.

SOURCE

Pmel17 (H-300) is a rabbit polyclonal antibody raised against amino acids 25-324 mapping within an N-terminal extracellular domain of Pmel17 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.

STORAGE

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

APPLICATIONS

Pmel17 (H-300) is recommended for detection of Pmel17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 Pmel17 siRNA (h): sc-40644, Pmel17 siRNA (m): sc-40645, Pmel17 shRNA Plasmid (h): sc-40644-SH, Pmel17 shRNA Plasmid (m): sc-40645-SH, Pmel17 shRNA (h) Lentiviral Particles: sc-40644-V and Pmel17 shRNA (m) Lentiviral Particles: sc-40645-V.

Molecular Weight of Pmel17 precursor: 100 kDa.

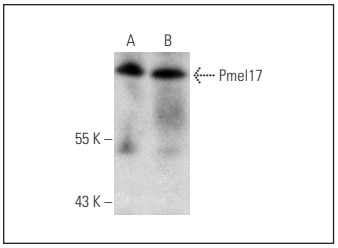
Molecular Weight of mature Pmel17: 76 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Pmel17 (H-300): sc-33590. Western blot analysis of Pmel17 expression in CCRF-CEM (**A**) and Jurkat (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nuccitelli, R., et al. 2010. Optimized nanosecond pulsed electric field therapy can cause murine malignant melanomas to self-destruct with a single treatment. Int. J. Cancer 127: 1727-1736.
2. Poliakov, E., et al. 2014. Multiple A2E treatments lead to melanization of rod outer segment-challenged ARPE-19 cells. Mol. Vis. 20: 285-300.

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.