**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 melanosomas based on their binding to specific monoclonal antibodies.

gp100, also designated ME20-M, ME20-S and PME17, 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 antibodies, including NKI-beteb, HMB-50 and HMB-45, which are used to diagnose melanosomas. Therefore, gp100 is considered a potential target for immunotherapy of malignant melanoma.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PMEL (human) mapping to 12q13.2.

**SOURCE**

Pmel17 (E-7) is a mouse monoclonal 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 IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Pmel17 (E-7) is available conjugated to agarose (sc-377325 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377325 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-377325 PE), fluorescein (sc-377325 FITC), Alexa Fluor® 488 (sc-377325 AF488) or Alexa Fluor® 647 (sc-377325 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

Pmel17 (E-7) is recommended for detection of Pmel17 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 1:30-1:300)].

Suitable for use as control antibody for Pmel17 siRNA (h): sc-40644, Pmel17 shRNA Plasmid (h): sc-40644-SH and Pmel17 shRNA (h) Lentiviral Particles: sc-40644-V.

Molecular Weight of Pmel17 precursor: 100 kDa.

Molecular Weight of mature Pmel17: 76 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236.

**RECOMMENDED SUPPORT REAGENTS**

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

1) Western Blotting: use m-IgGκ B-P-HRP: sc-516102 or m-IgGκ B-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ B-FITC: sc-516140 or m-IgGκ B-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Pmel17 (E-7): sc-377325. Western blot analysis of Pmel17 expression in SK-MEL-28 whole cell lysate.

**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 for detailed protocols and support products.