

Product datasheet

Anti-Melanoma gp100 antibody [PMEL/2038] ab238048

[3 Images](#)

Overview

Product name	Anti-Melanoma gp100 antibody [PMEL/2038]
Description	Mouse monoclonal [PMEL/2038] to Melanoma gp100
Host species	Mouse
Tested applications	Suitable for: Protein Array, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human Melanoma gp100 aa 376-502. The exact sequence is proprietary. Database link: P40967
Positive control	IHC-P: Human melanoma and skin tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Purity	Protein A/G purified
Purification notes	Purified from bioreactor concentrate by Protein A/G.
Clonality	Monoclonal
Clone number	PMEL/2038
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab238048** in the following tested applications.

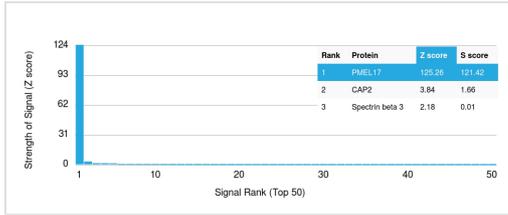
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Protein Array		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Incubate with primary antibody for 30 minutes at room temperature.

Target

Function	Plays a central role in the biogenesis of melanosomes. Involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. Release of the soluble form, ME20-S, could protect tumor cells from antibody mediated immunity.
Tissue specificity	Preferentially expressed in melanomas. Some expression was found in dysplastic nevi. Not found in normal tissues nor in carcinomas. Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth.
Sequence similarities	Belongs to the PMEL/NMB family. Contains 1 PKD domain.
Domain	The RPT domain is essential for the generation of the fibrillar matrix of melanosomes. The luminal domain is necessary for correct processing and trafficking to melanosomes.
Post-translational modifications	A small amount of P1/P100 (major form) undergoes glycosylation to yield P2/P120 (minor form). P2 is cleaved by a furin-like proprotein convertase (PC) in a pH-dependent manner in a post-Golgi, prelysosomal compartment into two disulfide-linked subunits: a large luminal subunit, M-alpha/ME20-S, and an integral membrane subunit, M-beta. Despite cleavage, only a small fraction of M-alpha is secreted, whereas most M-alpha and M-beta remain associated with each other intracellularly. M-alpha is further processed to M-alpha N and M-alpha C. M-alpha C further undergoes processing to yield M-alpha C1 and M-alpha C3 (M-alpha C2 in the case of PMEL17-is or PMEL17-ls). Formation of intraluminal fibrils in the melanosomes requires the formation of M-alpha that becomes incorporated into the fibrils. Stage II melanosomes harbor only Golgi-modified Pmel17 fragments that are derived from M-alpha and that bear sialylated O-linked oligosaccharides. N-glycosylated. O-glycosylated; contains sialic acid.
Cellular localization	Secreted and Endoplasmic reticulum membrane. Golgi apparatus. Melanosome. Endosome > multivesicular body. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Localizes predominantly to intraluminal vesicles (ILVs) within multivesicular bodies. Associates with ILVs found within the lumen of premelanosomes and melanosomes and particularly in compartments that serve as precursors to the striated stage II premelanosomes.

Images

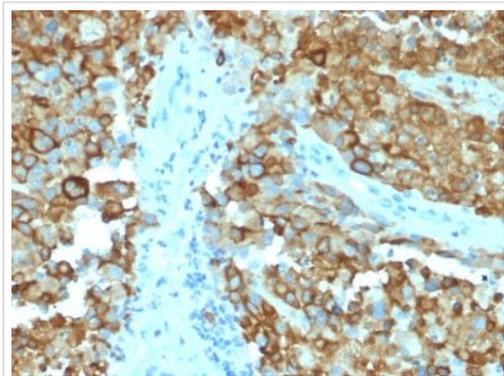


Protein Array - Anti-Melanoma gp100 antibody
[PMEL/2038] (ab238048)

ab238048 was tested in protein array against over 19000 different full-length human proteins.

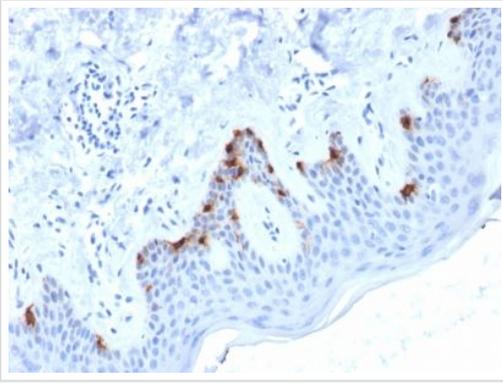
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Melanoma gp100 antibody [PMEL/2038] (ab238048)

Formalin-fixed, paraffin-embedded human melanoma tissue stained for Melanoma gp100 using ab238048 at 2 µg/ml in immunohistochemical analysis.



Formalin-fixed, paraffin-embedded human skin tissue stained for Melanoma gp100 using ab238048 at 2 µg/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Melanoma gp100 antibody [PMEL/2038] (ab238048)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors