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Product datasheet

Anti-Melanoma gp100 antibody [HMB45] - BSA and Azide free ab212829

1 References 2 Images

Overview

Product name	Anti-Melanoma gp100 antibody [HMB45] - BSA and Azide free
Description	Mouse monoclonal [HMB45] to Melanoma gp100 - BSA and Azide free
Host species	Mouse
Tested applications	**Suitable for:** IHC-P
Species reactivity	**Reacts with:** Human **Does not react with:** Rat, Dog
Immunogen	Tissue, cells or virus corresponding to Human Melanoma gp100. BALB/C mice were injected with extract of pigmented malanoma metastases from lymph nodes. Database link: **P40967**
Positive control	Human melanoma and testis tissues; SK-MEL-28 cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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	pH: 7.2 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Purification notes	ab212829 was purified from Bioreactor Concentrate by Protein A/G.
Clonality	Monoclonal

Clone number	HMB45
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab212829 in the following tested applications.

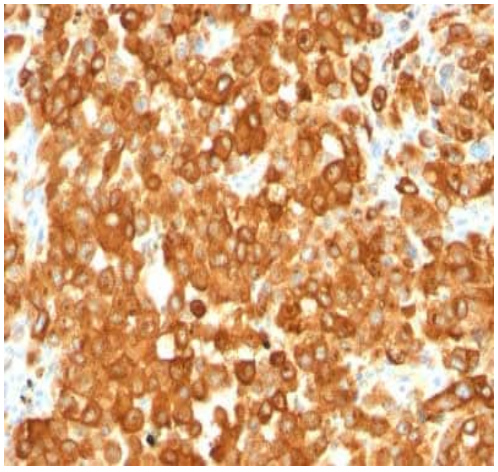
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. (Primary incubation for 30 minutes at RT).

Target

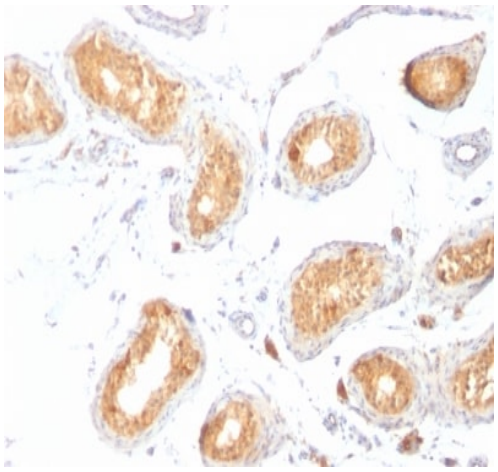
Function	Plays a central role in the biogenesis of melanosomes. Involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. Release of the 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 lumenal 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 lumenal 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 intralumenal 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 intralumenal 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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Melanoma gp100 antibody [HMB45] - BSA and Azide free (ab212829)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human melanoma tissue labeling Melanoma gp100 with ab212829 at 1 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Melanoma gp100 antibody [HMB45] - BSA and Azide free (ab212829)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human testis tissue labeling Melanoma gp100 with ab212829 at 1 µg/ml.

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