# abcam

## Product datasheet

## Anti-Melanoma gp100 antibody [HMB45] ab787

★★★★★ 3 Abreviews 36 References 5 图像

概述

产**品名称** Anti-Melanoma gp100**抗体**[HMB45]

**抽述** 小鼠单克隆抗体[HMB45] to Melanoma gp100

**宿主** Mouse

经测试应用 适用于: Flow Cyt, ICC/IF, IHC-P

种属反应性 与反应: Human

不与反应: Rat, Dog

免疫原 Tissue, cells or virus corresponding to Human Melanoma. BALB/C mice were injected with extract

of pigmented malanoma metastases from lymph nodes.

Database link: P40967

阳性对照 IHC-P: Human melanoma and testis tissue.

常规说明 The Life Colones industry has been in the grine of a year

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

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

**存储溶液** pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: Tissue culture supernatant, 0.05% BSA

纯度 Tissue culture supernatant

 克隆
 单克隆

 克隆编号
 HMB45

 同种型
 IgG1

1

轻链类型 kappa

#### 应用

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab787于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		1/10.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration. PubMed: 19841138
IHC-P	<b>★★★★</b> (2)	Use a concentration of 0.5 - 1 $\mu$ g/ml. Incubate for 30 minutes at room temperature. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes

#### 靶标

功能

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.

组织特异性

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.

序列相似性

Belongs to the PMEL/NMB family.

Contains 1 PKD domain.

结构域

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.

翻译后修饰

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 Golgimodified Pmel17 fragments that are derived from M-alpha and that bear sialylated O-linked oligosaccharides.

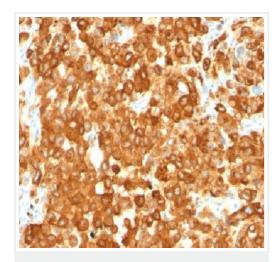
N-glycosylated. O-glycosylated; contains sialic acid.

细胞定位

Secreted and Endoplasmic reticulum membrane. Golgi apparatus. Melanosome. Endosome > multivesicular body. Identified by mass spectrometry in melanosome fractions from stage I to

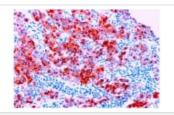
stage IV. Localizes predominantly to intralumenal vesicles (ILVs) within multivesicular bodies. Associates with ILVs found within the lumen of premelanosomes and melanosomes and particularly in compartments that serve as precursors to the striated stage II premelanosomes.

## 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Melanoma gp100 antibody [HMB45] (ab787)

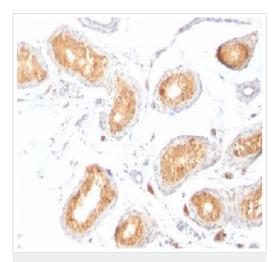
Formalin-fixed, paraffin-embedded human melanoma tissue stained with ab787 at 1  $\mu$ g/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Melanoma gp100 antibody [HMB45] (ab787)

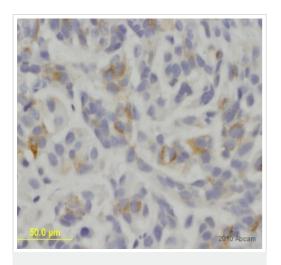
ab787 - immunohistochemistry

Formalin fixed paraffin embedded human melanoma stained with ab787, using ABC and AEC chromogen.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Melanoma gp100 antibody [HMB45] (ab787)

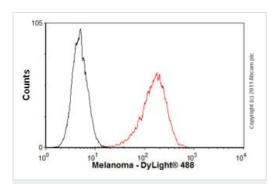
Formalin-fixed, paraffin-embedded human testis tissue stained with ab787 at 1  $\mu$ g/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Melanoma gp100 antibody [HMB45] (ab787)

This image is courtesy of an Abreview submitted by Dr. Hongwei Shao

ab787 staining Melanoma in the human Melanoma cell line WM3248 xenopraph by IHC-P (formaldehyde-fixed paraffinembedded sections). Tissue samples were fixed with formaldehyde; permeabilized with 0.1% Triton X-100 and blocked with 100% Dakocytomation X0909 for 1 hour at room temperature; antigen retrival was by heat mediation in Citric buffer (pH6). The sample was incubated with primary antibody (1/25) at 4°C for 18 hours. An HRP-conjugated Goat polyclonal to mouse IgG (1/100) was used as secondary antibody.



Flow Cytometry - Anti-Melanoma gp100 antibody [HMB45] (ab787)

Overlay histogram showing Malme-3 cells stained with ab787 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab787, 1/10 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat antimouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells ) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Malme-3 cells fixed with 4% paraformaldehyde

(10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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