abcam

ab787

Anti-Melanoma gp100 antibody [HMB45]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: Tissue culture supernatant, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing PMEL protein. The exact immunogen used to generate this antibody is proprietary information. Database link P40967
Clone number	HMB45
Purity	Tissue culture supernatant
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/10
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Rat
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Species	Dog
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

IHC-P

Tested

Species	Human
Dilution info	0.5-1 µg/mL
Notes	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

Not recommended

Species	Rat
Dilution info	-
Notes	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

Species	Dog
Dilution info	-
Notes	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

ICC/IF

Expected

Species	Human

Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat, Dog
Dilution info	-
Notes	-

Target data

See full target information PMEL

Function

Forms physiological amyloids that play a central role in melanosome morphogenesis and pigmentation. The maturation of unpigmented premelanosomes from stage I to II is marked by assembly of processed amyloidogenic fragments into parallel fibrillar sheets, which elongate the vesicle into a striated ellipsoidal shape. In pigmented stage III and IV melanosomes, the amyloid matrix serves as a platform where eumelanin precursors accumulate at high local concentrations for pigment formation. May prevent pigmentation-associated toxicity by sequestering toxic reaction intermediates of eumelanin biosynthesis pathway. Represents a potent melanoma-specific antigen. Among melanoma non-mutated self-peptides, G9-154 (KTWGQYWQV), G9-209 (ITDQVPFSV) and G9-280 (YLEPGPVTA), appear to act as immunodominant common epitopes that stimulate anti-tumor immune response mediated by HLA-A-restricted cytotoxic T cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

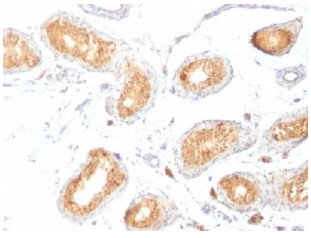
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

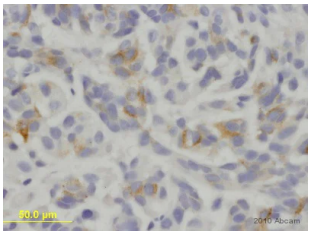
5 product images



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

Melanoma gp100 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Melanoma gp100 antibody

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

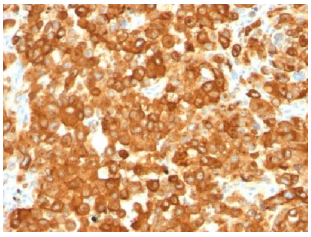


This image is courtesy of a customer review submitted by Dr. Hongwei Shao

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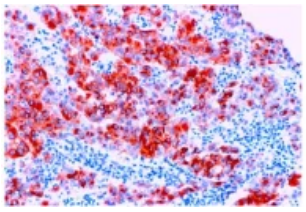
ab787 staining Melanoma in the human Melanoma cell line WM3248 xenopraph by IHC-P (formaldehyde-fixed paraffin-embedded sections). Tissue samples were fixed with formaldehyde; permeabilized with 0.1% Triton X-100 and blocked with 100% Dakocytomation X0909 for 1 hour at room temperature; antigen retrival 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.



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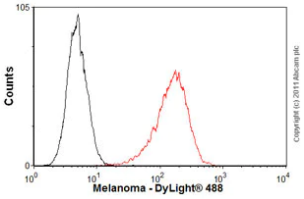


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ab787 - immunohistochemistry

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



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

Melanoma gp100 Flow Cytometry staining using mouse Anti-Melanoma gp100 antibody

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 anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 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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