

# Product Datasheet

## PMEL17/SILV Antibody (HMB45)

### NBP2-44520-0.1mg

Unit Size: 0.1 mg

Store at 4C.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Publications: 8**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-44520](http://www.novusbio.com/NBP2-44520)

Updated 10/23/2024 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-44520](http://www.novusbio.com/reviews/destination/NBP2-44520)



**NBP2-44520-0.1mg**

PMEL17/SILV Antibody (HMB45)

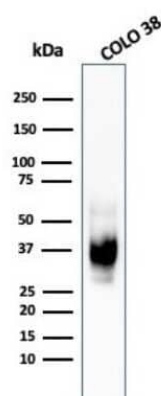
Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	HMB45
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Product Description	
Description	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP2-34638)  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
Host	Mouse
Gene ID	6490
Gene Symbol	PMEL
Species	Human, Canine (Negative), Rat (Negative)
Reactivity Notes	Does not react with Canine or Rat.
Marker	Melanoma Marker
Specificity/Sensitivity	The gp100 molecule is a 100kDa glycosylated protein that is cleaved into a small (26kDa) carboxy-terminal fragment and a larger amino- terminal section (6038kDa fragments. By immunohistochemistry, it specifically recognizes a protein in melanocytes and melanomas. This monoclonal antibody reacts with junctional and blue nevus cells and variably with fetal and neonatal melanocytes. Intradermal nevi, normal adult melanocytes, and non-melanocytic cells are negative. It does not stain tumor cells of epithelial, lymphoid, glial, or mesenchymal origin. Metastatic amelanotic melanoma can often be confused with a variety of poorly differentiated carcinomas, large cell lymphomas, and sarcomas using H E stains alone. It is also difficult to differentiate melanoma from spindle cell carcinomas and various types of mesenchymal neoplasms. This monoclonal antibody stains fetal and neonatal melanocytes, junctional and blue nevus cells, and malignant melanoma. This monoclonal antibody also stains Angiomyolipoma (PEComa).
Immunogen	Extract of pigmented melanoma metastases from lymph nodes
Product Application Details	
Applications	Western Blot, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunofluorescence, Multiplex Immunoassay



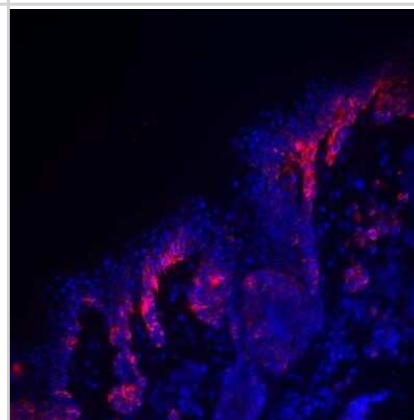
<b>Recommended Dilutions</b>	Western Blot 2-4 ug/ml, Flow Cytometry 1-2 ug/million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml, Flow (Intracellular), Immunofluorescence 1:50 - 1:100, Multiplex Immunoassay
<b>Application Notes</b>	Use in Multiplex Immunoassay reported in scientific literature (PMID: 31942075). Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. Use in Western blot reported in scientific literature (PMID: 30561643).

## Images

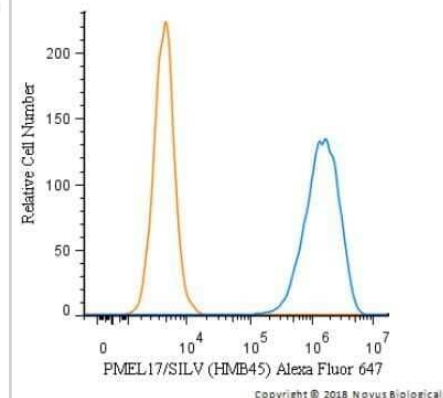
Western Blot: PMEL17/SILV Antibody (HMB45) [NBP2-44520] - Western Blot Analysis of COLO-38 cell lysate using PMEL17/SILV antibody (HMB45).



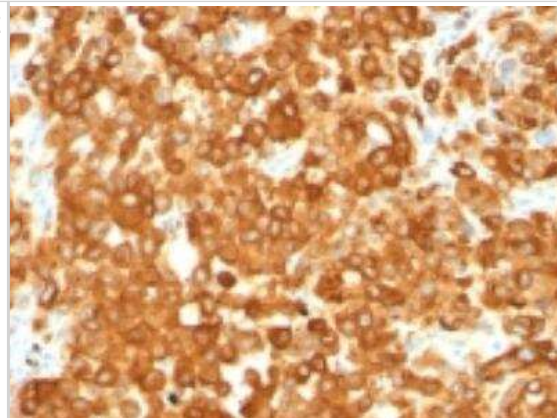
Immunohistochemistry: PMEL17/SILV Antibody (HMB45) [NBP2-44520] - PMEL17 (red) was detected in human skin (melanoma) using PMEL17-PE antibody (1:200) in PBS for 1 hour. Nuclei were stained with DAPI (blue). Image from a verified customer review. Image using the PE format of this antibody.



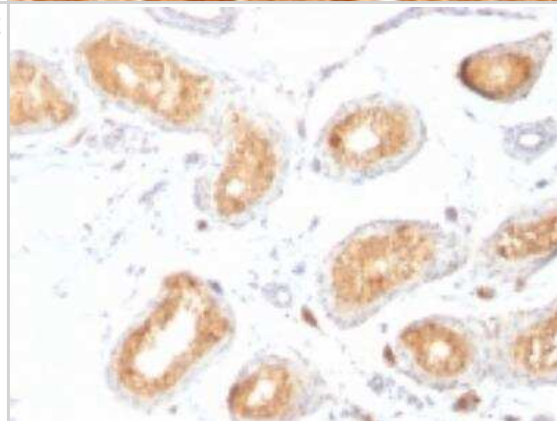
Flow (Intracellular): PMEL17/SILV Antibody (HMB45) [NBP2-44520] - An intracellular stain was performed on SK-MEL-28 cells with PMEL17/SILV Antibody [HMB45] NBP2-34638B (blue) and a matched isotype control (orange). Both antibodies were conjugated to Biotin. Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Streptavidin - R-Phycoerythrin Protein (2012-1000, Novus Biologicals). Image using the Biotin format of this antibody.



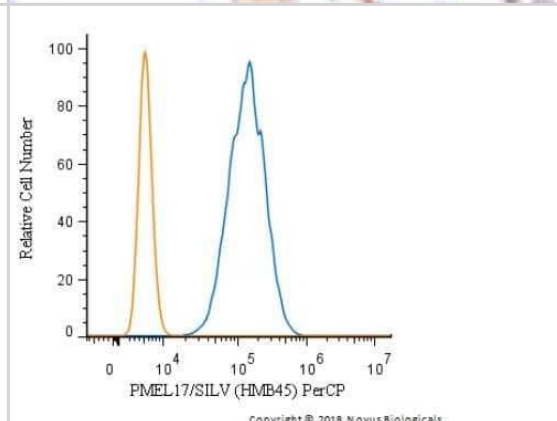
Immunohistochemistry-Paraffin: PMEL17/SILV Antibody (HMB45) [NBP2-44520] - Formalin-fixed, paraffin-embedded human melanoma stained with gp100/Melanosome Monoclonal Antibody (HMB45).



Immunohistochemistry-Paraffin: PMEL17/SILV Antibody (HMB45) [NBP2-44520] - Formalin-fixed, paraffin-embedded human testis stained with gp100/Melanosome Monoclonal Antibody (HMB45).



Flow (Intracellular): PMEL17/SILV Antibody (HMB45) [NBP2-44520] - Flow Cytometry: PMEL17/SILV Antibody (HMB45) - Azide and BSA Free [NBP2-34638] - An intracellular stain was performed on SK-MEL-28 cells with PMEL17/SILV Antibody (HMB45) NBP2-34638PCP (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to PerCP. Image using the Azide and BSA Free form of this antibody.



## Publications

Afanasyeva TAV, Corral-Serrano JC, Garanto A et al. A look into retinal organoids: methods, analytical techniques, and applications Cellular and Molecular Life Sciences 2021-10-01 [PMID: 34420069]

Elizabeth D. Hodges, Paul W. Chrystal, Tim Footz, Lance P. Doucette, Nicole C. L. Noel, Zixuan Li, Michael A. Walter, W. Ted Allison, Paola Cicatiello Disrupting the Repeat Domain of Premelanosome Protein (PMEL) Produces Dysamyloidosis and Dystrophic Ocular Pigment Reflective of Pigmentary Glaucoma International Journal of Molecular Sciences 2023-09-22 [PMID: 37833870]

Kamil Kruczek, Zepeng Qu, Emily Welby, Hiroko Shimada, Suja Hiriyanna, Milton A. English, Wadih M. Zein, Brian P. Brooks, Anand Swaroop In vitro modeling and rescue of ciliopathy associated with IQCB1/NPHP5 mutations using patient-derived cells Stem Cell Reports 2022-09-08 [PMID: 36084637]

Hodges E, Chrystal P, Footz T et al. Disrupting the Repeat Domain of Premelanosome Protein (PMEL) Produces Dysamyloidosis and Dystrophic Ocular Pigment Reflective of Pigmentary Glaucoma International Journal of Molecular Sciences 2023-09-22 (WB, Human)

JOR Hernandez, X Wang, M Vazquez-Se, M Lopez-Marf, MF Sobral-Rey, A Moran-Horo, M Sundberg, DO Lopez-Cant, CK Probst, GU Ruiz-Espar, K Giannikou, R Abdi, EP Henske, DJ Kwiatkowski, M Sahin, DR Lemos A tissue-bioengineering strategy for modeling rare human kidney diseases in vivo Nature Communications, 2021-11-11;12 (1):6496. 2021-11-11 [PMID: 34764250] (FLOW)

Phelan MA, Kruczek K, Wilson JP et al. Soy protein nanofiber scaffolds for uniform maturation of hiPSC-derived retinal pigment epithelium Tissue Eng Part C Methods 2020-07-07 [PMID: 32635833]

Helmink BA, Reddy SM, Gao J et al. B cells and tertiary lymphoid structures promote immunotherapy response Nature. [PMID: 31942075] (MI, Human)

Lahola-Chomiak AA, Footz T, Nguyen-Phuoc K et al. Non-Synonymous variants in Premelanosome Protein (PMEL) cause ocular pigment dispersion and pigmentary glaucoma Hum. Mol. Genet. 2018-12-17 [PMID: 30561643] (WB, Human)





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

[www.novusbio.com](http://www.novusbio.com)  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP2-44520-0.1mg**

---

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NBP2-38185PEP	PMEL17/SILV Recombinant Protein Antigen

---

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-44520](http://www.novusbio.com/reviews/submit/NBP2-44520)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

