

# Melanoma; Clone HMB45

## (Concentrate)

<b>Availability/Contents:</b>	<u>Item #</u>	<u>Volume</u>
	A00019-C	1 ml


**Description:**

Species:	Mouse
Immunogen:	BALB/C mice were injected with extract of pigmented melanoma metastases from lymph nodes.
Clone:	HMB45
Isotype:	Mouse IgG1/ Kappa
Format:	This antibody is provided in a phosphate buffer saline containing 1% BSA.
Specificity:	HMB45 has been shown to be a very specific marker for melanomas.

**Background:** HMB45 is a mouse monoclonal antibody that reacts against an antigen present in melanocytic tumors such as melanomas. It reacts positively against melanocytic tumors but not other tumors, thus signifying specificity and sensitivity. HMB45 is generally thought of as a melanoma specific antibody; however, there are certain exceptions. The antibody also reacts positively against junctional nevus cells but not intra-dermal nevi and against fetal melanocytes but not normal adult melanocytes. The expression of the HMB45 antigen indicates active melanosome formation and thus melanocytic differentiation. It is also expressed in normal fetal melanocytes, but not in normal resting adult melanocytes, regardless of the degree of pigmentation. Upon activation, adult melanocytes can re-express the HMB45-defined antigen (as it is expressed in fetal melanocytes). Such melanocytes are activated by a variety of stimuli. For example, HMB45 positive cells have been detected in tissue overlying or adjacent to granulation tissue, hemangiomas, vessel-rich tumor stroma, and basal cell carcinoma. Hair follicles stain occasionally due to associated stimulated melanocytes. Positive HMB45 staining has not been observed with melanocytes in lentiginos or overlying fibroblastic proliferations such as keloids, dermatofibromas and old fibrotic hemangiomas. Non-melanocytic normal tissues do not react with the HMB45 antibody.

Species Reactivity:	Human
Positive Control:	Human Melanoma
Titer/Working dilution:	Immunohistochemistry: 1:250-500
Cellular Localization:	Cytoplasmic
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

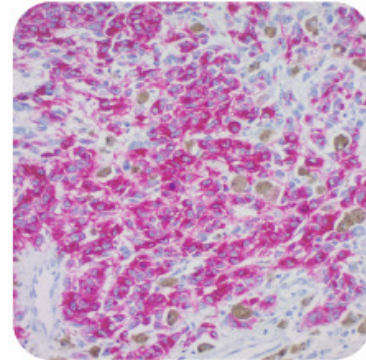


ScyTek Laboratories, Inc.  
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**CE**

EC REP EmergoEurope (31)(0) 70 345-8570  
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**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Use caution when handling reagents.  
 Non-Sterile.



Human Melanoma stained with Ultra-Tek Alk-Phos and Permanent Red Chromogen.

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**


**Procedure:**


1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Skelton HG, Smith KJ, Barrett TL, Lupton GP, Graham JH. HMB-45 staining in benign and malignant melanocytic lesions. *Amer J Dermatopathol* 1991;13(6):543-50.
2. Kapur RP, Bigler SA, Skelly M, Gown AM. Anti-melanoma monoclonal antibody HMB45 identifies an oncofetal glycoconjugate associated with immature melanosomes. *J Histochem Cytochem* 1992;40(2):207-12.
3. Esclamado RM, Gown AM, Vogel AM. Unique proteins defined by monoclonal antibodies specific for human melanoma. *Amer J Surg* 1986;152(4):376-85.
4. Gown AM, Vogel AM. Monoclonal antibodies to intermediate filament proteins of human cells: Unique and cross-reacting antibodies. *J Cell Biol*. 1982;95(2 Pt 1):414-24.
5. Colombari R, Bonetti F, Zamboni G, Scarpa A, Marino F, Tomezzoli A, Capelli P, Menestrina F, Chilosi M, Fiore-Donati L. Distribution of melanoma specific antibody (HMB-45) in benign and malignant melanocytic tumors. *Virch Arch A Pathol Anat* 1988;413(1):17-24.

Storage: 2° C  8° C

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Instructions For Use  
**A00019-C-IFU-RUO**

Rev. Date: May 13, 2013

Revision: 1

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**Warranty:**

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Storage: 2° C




8° C



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