

## Overview

### Useful For

Identification of activated and neoplastic melanocytes

### Testing Algorithm

For the initial technical component only immunohistochemical (IHC) stain performed, the appropriate bill-only test ID will be reflexed and charged (IHTOI). For each additional technical component only IHC stain performed, an additional bill-only test ID will be reflexed and charged (IHTOA).

### Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
IHTOI	IHC Initial, Tech Only	No	No
IHTOA	IHC Additional, Tech Only	No	No

### Method Name

Immunohistochemistry (IHC)

### NY State Available

Yes

## Specimen

### Specimen Type

TECHONLY

### Ordering Guidance

This test includes only technical performance of the stain (no pathologist interpretation is performed). If diagnostic consultation by a pathologist is required order PATHC / Pathology Consultation.

### Shipping Instructions

Attach the green pathology address label and the pink Immunostain Technical Only label included in the kit to the outside of the transport container.

### Specimen Required

**Supplies:** Immunostain Technical Only Envelope (T693)

**Specimen Type:** Tissue

**Container/Tube:** Immunostain Technical Only Envelope

**Preferred:** 2 Unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; sections 4-microns thick.

**Acceptable:** Formalin-fixed, paraffin-embedded (FFPE) tissue block

## Digital Image Access

1. Information on accessing digital images of IHC stains and the manual requisition form can be accessed through this website: <https://news.mayocliniclabs.com/ihc-stains/>
2. Clients ordering stains using a manual requisition form will not have access to digital images.
3. Clients wishing to access digital images must place the order for IHC stains electronically. Information regarding digital imaging can be accessed through this website: <https://news.mayocliniclabs.com/ihc-stains/#FAQ>

## Forms

If not ordering electronically, complete, print, and send a [Immunohistochemical \(IHC\)/In Situ Hybridization \(ISH\) Stains Request](#) (T763) with the specimen.

## Reject Due To

Wet/frozen tissue                      Reject  
 Cytology smears  
 Nonformalin fixed tissue  
 Nonparaffin embedded tissue  
 Noncharged slides  
 ProbeOn slides

## Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
TECHONLY	Ambient (preferred)		
	Refrigerated		

## Clinical & Interpretive

### Clinical Information

The HMB45 immunostain identifies an antigen that is associated with a premelanosomal glycoprotein found in activated and neoplastic melanocytes. Most melanomas (approximately 90%) react with HMB45. HMB45 staining is cytoplasmic and is usually diffuse but may be focal. Benign nevi (moles) and other tumors that have melanin production (such as peripheral nerve sheath tumors) also stain positively.

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**Interpretation**

This test does not include pathologist interpretation; only technical performance of the stain. If interpretation is required order PATHC / Pathology Consultation for a full diagnostic evaluation or second opinion of the case.

The positive and negative controls are verified as showing appropriate immunoreactivity and documentation is retained at Mayo Clinic Rochester. If a control tissue is not included on the slide, a scanned image of the relevant quality control tissue is available upon request; call 855-516-8404.

Interpretation of this test should be performed in the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

**Cautions**

Age of a cut paraffin section can affect immunoreactivity. Stability thresholds vary widely among published literature and are antigen dependent. Best practice is for paraffin sections to be cut within 6 weeks.

**Clinical Reference**

1. Uguen A, Uguen M, Gujbourg B, Talagas M, Marcorelles P, De Braekeleer M: The p16-Ki-67-HMB45 immunohistochemistry scoring system is highly concordant with the fluorescent in situ hybridization test to differentiate between melanocytic nevi and melanomas. *Appl Immunohistochem Mol Morphol*. 2018 Jul;26(6):361-367. doi: 10.1097/PAI.0000000000000428
2. Kriegsmann M, Kriegsmann M, Kriegsmann K, et al: Expression of HMB45, melanA and SOX10 is rare in non-small cell lung cancer. *Diagn Pathol*. 2018 Sep 11;13(1):68. doi: 10.1186/s13000-018-0751-7
3. Garola R, Singh V: Utility of p16-Ki-67-HMB45 score in sorting benign from malignant Spitz tumors. *Pathol Res Pract*. 2019 Oct;215(10):152550. doi: 10.1016/j.prp.2019.152550

**Performance****Method Description**

Immunohistochemistry on sections of paraffin-embedded tissue.(Unpublished Mayo method)

**PDF Report**

No

**Specimen Retention Time**

Until staining is complete.

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**Performing Laboratory Location**

Rochester

**Fees & Codes****Test Classification**

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

88342-TC, primary

88341-TC, if additional IHC

**LOINC® Information**

Test ID	Test Order Name	Order LOINC Value
HMB45	HMB45 IHC, Tech Only	Order only;no result

Result ID	Reporting Name	LOINC®
70772	HMB45 IHC, Tech Only	Bill only; no result