

HMB-45 (HMB-45)

For In Vitro Diagnostic Use (IVD)

English: Instructions For Use

Presentation

Anti-HMB-45 is a mouse monoclonal antibody from ascites diluted in tris buffered saline, pH 7.3-7.7, with protein base, and preserved with sodium azide.

Applications

This antibody gives a qualitative assessment of malignant melanoma, which can be extremely difficult to diagnose. Metastatic amelanotic melanoma can often be confused with a variety of poorly differentiated carcinomas, large cell lymphomas, and sarcomas. It is also difficult to differentiate melanoma from spindle cell carcinomas and various types of mesenchymal neoplasms. Melanoma antibody stains fetal and neonatal melanocytes, junctional and blue nevus cells, and malignant melanocytes. Typically, a keratin negative, vimentin rich neoplasm, that immunoreacts with antibody to S-100 protein and this melanoma antibody is, with rare exception, a melanoma.

Reactivity	Paraffin, frozen
Control	Melanoma
Visualization	Cytoplasmic
Stability	Up to 36 months; store at 2-8°C
Isotype	IgG ₁ /κ

The immunoglobulin concentration of the reagent appears on the product label.

Antibody color does not affect performance

Description	Cat. No.	Dilution/Comments
0.1 ml, concentrate	282M-94	1:100 - 1:500*
0.5 ml, concentrate	282M-95	1:100 - 1:500*
1 ml, concentrate	282M-96	1:100 - 1:500*
1 ml, prediluted	282M-97	Ready to use
7 ml, prediluted	282M-98	Ready to use
Positive control slides	282S	5 slides per pack

- prediluted
 concentrate

Preparation and Pretreatment

- Cut 3-4 μm section of formalin-fixed paraffin-embedded tissue and place on positively charged slides; dry overnight at 58°C.
- Deparaffinize, rehydrate, and epitope retrieve; the preferred method is the use of Heat Induced Epitope Retrieval (HIER) techniques using Cell Marque's Trilogy™ in conjunction with a pressure cooker. The preferred method allows for simultaneous deparaffinization, rehydration, and epitope retrieval. Upon completion, rinse with 5 changes of distilled or deionized water.
- If using HRP detection system, place slides in peroxide block for 10 minutes; rinse. If using AP detection system, omit this step.

Recommended Protocol for Staining at Room Temperature Using CytoScan™ BSA Detection System

- Apply the antibody and incubate for 30 - 60 minutes; rinse.
- Apply the link and incubate for 10 minutes; rinse.
- Apply the label and incubate for 10 minutes; rinse.
- Apply ample amount of chromogen and incubate for 1 - 10 minutes; rinse.
- Dehydrate and coverslip.

Recommended Protocol for Staining at Room Temperature Using PolyScan™ Polymer Detection System

- Apply the antibody and incubate for 30 - 60 minutes; rinse.
- Apply the PolyScan™ Polymer Rabbit/Mouse Detection System for 30 minutes; rinse.
- Apply ample amount of chromogen and incubate for 1 - 10 minutes; rinse.
- Dehydrate and coverslip.

References

- Gown, AM, et al. A J Path 1986;123:195
- Wick, MR, et al. Arch Path Lab 1988;112:616
- Leong, ASY, et al. Surg Path 1989;2:137
- Abrahamsen HN et al. Cancer. 2004 Apr 15;100(8):1683-91
- Vaggelli L et al. Tumori. 2000 jul-Aug;86(4):346-8
- Baisden BL et al. Am J Surg Pathol. 2000 Aug;24(8):1140-6

*The dilutions set forth above are estimates; actual results may differ because of variability in methods and protocols. Validation of antibody performance/protocol is the responsibility of the end user.