

DATA SHEET

Melanoma (gp100) Ab-1 (Clone HMB45)

Mouse Monoclonal Antibody

Cat. #09141, 09142, or 09140 (0.1ml, 0.5ml, or 1.0ml Supernatant)

Cat. #09139 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Comments: By immunohistochemistry, Ab-1 specifically recognizes a protein in melanocytes and melanomas. Intradermal nevi, normal adult melanocytes, and non-melanocytic cells are negative. It does not stain tumor cells of epithelial, lymphoid, glial, or mesenchymal origin.

Mol. Wt. of Antigen: 100kDa

Species Reactivity: Human. Does not react with dog and rat. Others-not known.

Clone Designation: HMB45

Ig Isotype / Light Chain: IgG_1 / κ

Immunogen: Extract of pigmented melanoma metastases from lymph nodes.¹

Applications and Suggested Dilutions:

- Western Blotting (Ab 1:50 for 2hrs at RT)
- Immunohistology (Formalin/paraffin)
- (Ab 1:40-1:80 for 30 min at RT; Ab-3 is better)
- * [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 min.]

The optimal dilution for a specific application under a given set of experimental conditions should be determined by the investigator.

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Supplied As:

Tissue culture supernatant with 0.09% sodium azide,

or

Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.

Key References:

1. Esclamado RM, et. al. American Journal of Surgery, 1986, 152(4):376-85.

2. Gown AM, et. al. American Journal of Pathology, 1986, 123(2):195-203.

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Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only



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Additional Key References:

1. Longacre TA; Egbert BM; Rouse RV. Desmoplastic and spindle-cell malignant melanoma. An immunohistochemical study. American Journal of Surgical Pathology, 1996 Dec, 20(12):1489-500.

2. Ramachandra S; Gillett CE; Millis RR. A comparative immunohistochemical study of mammary and extramammary Paget's disease and superficial spreading melanoma, with particular emphasis on melanocytic markers. Virchows Archiv, 1996 Dec, 429(6):371-6.

3. Barrett AW; Bennett JH; Speight PM. A clinicopathological and immunohistochemical analysis of primary oral mucosal melanoma. European Journal of Cancer. Part B, Oral Oncology, 1995 Mar, 31B(2):100-5.

4. Longatto Filho A; de Carvalho LV; Santos G da C; Oyafuso MS; Lombardo V; Bortolan J; Neves JI. Cytologic diagnosis of melanoma in serous effusions. A morphologic and immunocytochemical study. Acta Cytologica, 1995, 39(3):481-4.

5. Schwechheimer K; Zhou L. HMB45: a specific marker for melanoma metastases in the central nervous system? Virchows Archiv, 1995, 426(4):351-3.

6. Tanaka H; Imada A; Morikawa T; Shibusa T; Satoh M; Sekine K; Abe S. Diagnosis of pulmonary lymphangioleiomyomatosis by HMB45 in surgically treated spontaneous pneumothorax. European Respiratory Journal, 1995 Nov, 8(11):1879-82.

7. Anstey A; Cerio R; Ramnarain N; Orchard G; Smith N; Jones EW. Desmoplastic malignant melanoma. An immunocytochemical study of 25 cases. American Journal of Dermatopathology, 1994, 16(1):14-22.

8. Mottolese M; Venturo I; Benevolo M; Di Filippo F; Lopez M; Bigotti A; Natali PG. Immunocytochemical diagnosis of amelanotic metastatic melanoma using monoclonal antibodies HMB-45 and Ep1-3. Melanoma Research, 1994, 4(1):53-8.

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12. Reyes-Mugica M; Chou P; Byrd S; Ray V; Castelli M; Gattuso P; Gonzalez-Crussi F. Nevomelanocytic proliferations in the central nervous system of children. Cancer, 1993, 72(7):2277-85.

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14. Kapur RP; Bigler SA; Skelly M; Gown AM. Anti-melanoma monoclonal antibody HMB45 identifies an oncofetal glycoconjugate associated with immature melanosomes. Journal of Histochemistry and Cytochemistry, 1992, 40:207-12.

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17. Thomson W; MacKie RM. Comparison of five antimelanoma antibodies for identification of melanocytic cells on tissue sections in routine dermatopathology. Journal of the American Academy of Dermatology, 1989 Dec, 21(6):1280-4.

18. Ordonez NG; Ji XL; Hickey RC. Comparison of HMB-45 monoclonal antibody and S-100 protein in the immunohistochemical diagnosis of melanoma. American Journal of Clinical Pathology, 1988, 90(4):385-90.