

## DATA SHEET

# **Tyrosinase Ab-1**

Mouse Monoclonal Antibody

 $Cat. \ \#DLN-10965, -10966, or \ -10964 \ (0.1ml, \ 0.5ml, or \ 1.0ml \ at \ 200\mu g/ml) \ (\text{Purified Ab with BSA and Azide})$ 

Cat. #DLN-10967 or -10968 (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #DLN-10962, DLN-10963, or DLN-10961 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)

Cat. #DLN-10969 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

**Description:** Tyrosinase is a copper-containing metalloglycoprotein that catalyzes several steps in the melanin pigment biosynthetic pathway; the hydroxylation of tyrosine to L-3,4-dihydroxy-phenylalanine (dopa), and the subsequent oxidation of dopa to dopaquinone. Mutations of the tyrosinase gene occur in various forms of albinism. Tyrosinase is one of the targets for cytotoxic T-cell recognition in melanoma patients.

**Comments:** Ab-1 shows no cross-reaction with MAGE-1 and tyrosinase-related protein 1, TRP-1/gp75. Staining of melanomas with Ab-1 showed tyrosinase in melanotic as well as amelanotic variants. Ab-1 is a useful marker for melanocytes and melanomas. Occasionally a minor band at 55kDa is also detected in Western Blotting.

Mol. Wt. of Antigen: 70-80kDa

**Epitope:** aa 1-433

**Species Reactivity:** Human. Others-not known.

**Clone Designation:** T311

Ig Isotype: IgG2a

*Immunogen:* Recombinant tyrosinase protein.

## Applications and Suggested Dilutions:

- Immunocytology
- Immunofluorescence
- WesternBlotting (1:25-1:100for 2hrs at RT)
- Immunohistology (Formalin/paraffin) Use Ab 1:50-1:100for 20min at RT
- \* [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 1mM EDTA, pH 8.0, for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** Melanoma cell lines and Melanoma.

**Cellular Localization:** Cytoplasmic



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## Supplied As:

Antibody purified from ascites fluid by Protein A chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml,

or

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

## Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

#### Key References:

1.Chen Y-T, et. al.Proc. Natl.Acad. Sci. USA, 1995, 92:8125-8129.

### 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.

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