

Tyrosinase (Melanoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone T311 + OCA1/812]

Catalog # AH12479

Product Information

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|-------------------|---|
| Application | IF, FC, IHC-P |
| Primary Accession | P14679 |
| Other Accession | 7299 , 503555 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG's |
| Clone Names | T311 + OCA1/812 |
| Calculated MW | 60393 |

Additional Information

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| Gene ID | 7299 |
| Other Names | Tyrosinase, 1.14.18.1, LB24-AB, Monophenol monooxygenase, SK29-AB, Tumor rejection antigen AB, TYR |
| Application Note | IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | Tyrosinase (Melanoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| Name | TYR (HGNC:12442) |
| Function | This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the initial and rate limiting step in the cascade of reactions leading to melanin production from tyrosine (By similarity). In addition to hydroxylating tyrosine to DOPA (3,4- dihydroxyphenylalanine), also catalyzes the oxidation of DOPA to DOPA- quinone, and possibly the oxidation of DHI (5,6-dihydroxyindole) to indole-5,6 quinone (PubMed: 28661582). |
| Cellular Location | Melanosome membrane; Single-pass type I membrane protein. Melanosome {ECO:0000250 UniProtKB:P11344}. Note=Proper trafficking to melanosome is regulated by SGSM2, ANKRD27, RAB9A, RAB32 and RAB38 {ECO:0000250 UniProtKB:P11344} |

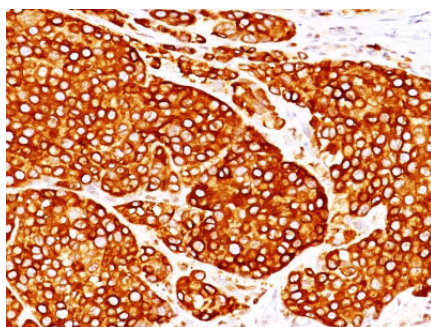
Background

Recognizes a cluster of proteins between 70-80kDa, identified as tyrosinase. Occasionally a minor band at 55kDa is also detected. This MAb shows no cross-reaction with MAGE-1 and tyrosinase-related protein 1, TRP-1/gp75. 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. Staining of melanomas with this MAb shows tyrosinase in melanotic as well as amelanotic variants. This MAb is a useful marker for melanocytes and melanomas.

References

Chen Y-T, et. al. Proc. Natl. Acad. Sci. USA, 1995, 92:8125-8129. | Hearing, V.J., et al. 1987. Mammalian tyrosinase—the critical regulatory control point in melanocyte pigmentation. Int. J. Biochem. 19: 1141-1147

Images



Formalin-fixed, paraffin-embedded Melanoma stained with Tyrosinase Monoclonal Antibody (T311 + OCA1/812).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.