

Mouse Anti-Tyrosinase [T311+OCA1/812]: MC0964, MC0964RTU7

Intended Use: For Research Use Only

Description: Tyrosinase is a key enzyme involved in the initial stages of melanin biosynthesis. Tyrosinase catalyzes the hydroxylation of tyrosine to 3,4-dihydroxyphenylalanine (DOPA). Oxidation reactions of DOPA to L-Dopaquinone and 5,6-dihydroxyindole (DHI) to indole-quinone occur spontaneously at physiological pH. Tyrosinase is expressed in melanin-producing cells such as melanocytes, which are primarily localized in the skin, hair bulbs and eyes. Low levels of tyrosinase mRNA was also detected in the human substantia nigra, but immunohistochemically unreactive. Since melanomas arise from melanocytes, there is evidence that tyrosinase is expressed in malignant melanomas. Studies have shown that tyrosinase is a sensitive and reliable marker to assess melanocytic lesions in paraffin-embedded tissue.

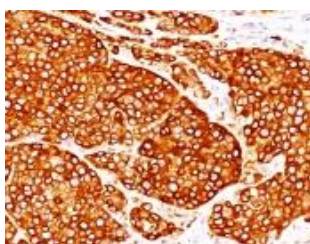
Specifications

Clone: T311+OCA1/812
 Source: Mouse
 Isotype: IgG's
 Reactivity: Human
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., IF
 Package:

Description	Catalog No.	Size
Tyrosinase Concentrated	MC0964	1 ml
Tyrosinase Prediluted	MC0964RTU7	7 ml

IHC Procedure

Positive Control Tissue: Melanoma
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human melanoma stained with anti-Tyrosinase using DAB

References:

1. Melanocytes Affect Nodal Expression and Signaling in Melanoma Cells: A Lesson from Pediatric Large Congenital Melanocytic Nevi. Margaryan NV, et al. Int J Mol Sci 17:418, 2016.
2. In vitro modeling of hyperpigmentation associated to neurofibromatosis type 1 using melanocytes derived from human embryonic stem cells. Allouche J, et al. Proc Natl Acad Sci U S A 112:9034-9, 2015.
3. Optical Photoacoustic Detection of Circulating Melanoma Cells In Vitro. Gutiérrez-Juárez G, et al. Int J Thermophys 31:784-792, 2010.

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