

# Tyrosinase-Related Protein-1 (TYRP-1) (Melanoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone TYRP1/807 ] Catalog # AH12482

## **Product Information**

Application Primary Accession	IHC, IF, FC P17643
Other Accession	<u>7306, 270279</u>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	TYRP1/807
Calculated MW	60724

#### **Additional Information**

Gene ID	7306
Other Names	5, 6-dihydroxyindole-2-carboxylic acid oxidase, DHICA oxidase, 1.14.18, Catalase B, Glycoprotein 75, Melanoma antigen gp75, Tyrosinase-related protein 1, TRP, TRP-1, TRP1, TYRP1, CAS2, TYRP, TYRRP
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Tyrosinase-Related Protein-1 (TYRP-1) (Melanoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	TYRP1 ( <u>HGNC:12450</u> )
Function	Plays a role in melanin biosynthesis (PubMed: <u>16704458</u> , PubMed: <u>22556244</u> , PubMed: <u>23504663</u> ). Catalyzes the oxidation of 5,6- dihydroxyindole-2-carboxylic acid (DHICA) into indole-5,6-quinone-2- carboxylic acid in the presence of bound Cu(2+) ions, but not in the presence of Zn(2+) (PubMed: <u>28661582</u> ). May regulate or influence the type of melanin synthesized (PubMed: <u>16704458</u> , PubMed: <u>22556244</u> ). Also to a lower extent, capable of hydroxylating tyrosine and producing melanin (By similarity).
Cellular Location	Melanosome membrane {ECO:0000250 UniProtKB:P07147}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:P07147}. Note=Located to

mature stage III and IV melanosomes and apposed endosomal tubular membranes. Transported to pigmented melanosomes by the BLOC-1 complex. Proper trafficking to melanosome is regulated by SGSM2, ANKRD27, RAB9A, RAB32 and RAB38 {ECO:0000250|UniProtKB:P07147}

Tissue Location

Pigment cells.

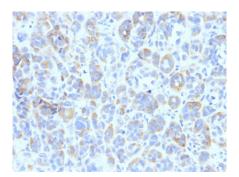
### Background

It reacts with a 75kDa melanocyte-specific gene product, identified as Tyrosinase-related protein-1 (TRP-1). It is involved in melanin synthesis. TRP1 is present on the melanosomal membranes of melanoma, normal melanocytes and nevi. IRecent evidence suggests that TRP-1 is involved in maintaining stability of tyrosinase protein and modulating its catalytic activity. TRP-1 is also involved in maintenance of melanosome ultrastructure and affects melanocyte proliferation and cell death.

## References

Orlow, S.J., et al. 1994. High-molecular-weight forms of tyrosinase and the tyrosinase-related proteins: evidence for a melanogenic complex. J. Invest. Dermatol. 103: 196-201.

#### Images



Formalin-fixed, paraffin-embedded human Melanoma stained with TYRP1 Monoclonal Antibody (TYRP1/807)

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