

Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody Recombinant Rabbit Monoclonal Antibody Catalog # AH13564

## Specification

# Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC-P, IF, FC <u>P17643</u> <u>270279</u> Human, Mouse Rabbit Monoclonal Rabbit / IgG, kappa 60724

#### Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - Additional Information

Gene ID 7306

**Other Names** 

5, 6 dihydroxyindole 2 carboxylic acid oxidase, 6-dihydroxyindole-2-carboxylic acid oxidase, Associated with iris pigmentation, CAS2, Catalase B (CATB), DHICA oxidase, Glycoprotein75 (GP75), Melanoma antigen gp75, Tyrosinase-related protein 1 (TYRP1), TYRRP

Application Note <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

Format

200ug/ml of Ab purified by Protein A. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - Protein Information

Name TYRP1 (<u>HGNC:12450</u>)

Function

Plays a role in melanin biosynthesis (PubMed:<a

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href="http://www.uniprot.org/citations/16704458" target="_blank">16704458</a>, PubMed:<a href="http://www.uniprot.org/citations/22556244" target="_blank">22556244</a>, PubMed:<a href="http://www.uniprot.org/citations/23504663" target="_blank">23504663</a>). Catalyzes
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the oxidation of 5,6- dihydroxyindole-2-carboxylic acid (DHICA) into indole-5,6-quinone-2carboxylic acid in the presence of bound Cu(2+) ions, but not in the presence of Zn(2+) (PubMed:<a href="http://www.uniprot.org/citations/28661582" target="\_blank">28661582</a>). May regulate or influence the type of melanin synthesized (PubMed:<a href="http://www.uniprot.org/citations/16704458" target="\_blank">16704458</a>, PubMed:<a href="http://www.uniprot.org/citations/22556244" target="\_blank">22556244</a>). 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}

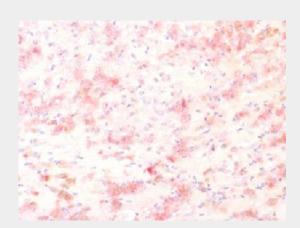
**Tissue Location** Pigment cells.

# Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - Images



Formalin-fixed, paraffin-embedded human Melanoma stained with TYRP1 Recombinant Rabbit Monoclonal Antibody (TYRP1/1564R) using AEC Chromogen (red).

## Anti-Tyrosinase-Related Protein-1 (TYRP-1) Antibody - 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. Recent 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.