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

Recombinant Rabbit Monoclonal Antibody
Catalog # AH13564

Product Information

Application	IHC-P, IF, FC
Primary Accession	P17643
Other Accession	270279
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit / IgG, kappa
Clone Names	TYRP1/1564R
Calculated MW	60724

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	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (5-10ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

Protein Information

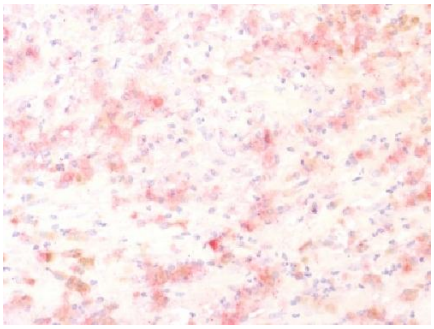
Name	TYRP1 (HGNC:12450)
Function	Plays a role in melanin biosynthesis (PubMed: 16704458, PubMed:22556244, PubMed:23504663). Catalyzes the oxidation of 5,6-dihydroxyindole-2-carboxylic acid (DHICA) into indole-5,6-quinone-2-carboxylic acid in the presence of bound Cu(2+) ions, but not in the presence

	of Zn(2+) (PubMed:28661582). May regulate or influence the type of melanin synthesized (PubMed:16704458, PubMed:22556244). 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. 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.

Images



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

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