

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

Mouse Monoclonal Antibody [Clone SPM611]

Catalog # AH12485

Product Information

| | |
|-------------------|---|
| Application | IHC, IF, FC |
| Primary Accession | P17643 |
| Other Accession | 7306 , 270279 |
| Reactivity | Human, Mouse |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG2a, kappa |
| Clone Names | SPM611 |
| 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 (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.

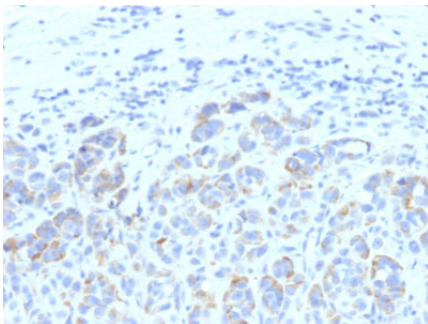
Background

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.

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 (SPM611)

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