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TYRP1 Rabbit pAb

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Catalog # AP56026

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P17643
Reactivity	Human, Mouse
Predicted	Rat, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60724
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TYRP1
Epitope Specificity	101-200/537
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Melanosome membrane; Single-pass type I membrane protein (By similarity). Note=Located to mature stage III and IV melanosomes and apposed endosomal tubular membranes. Transported to pigmented melanosomes by the BLOC-1 complex (By similarity).
SIMILARITY	Belongs to the tyrosinase family.
DISEASE	Albinism oculocutaneous 3 (OCA3) [MIM:203290]: An autosomal recessive disorder in which the biosynthesis of melanin pigment is reduced in skin, hair, and eyes. Tyrosinase activity is normal and patients have only moderate reduction of pigment. The eyes present red reflex on transillumination of the iris, dilution of color of iris, nystagmus and strabismus. Darker-skinned individuals have bright copper-red coloration of the skin and hair. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	TRP1 is a melanosomal enzyme that belongs to the tyrosinase family and plays an important role in the melanin biosynthetic pathway. Defects in this gene are the cause of rufous oculocutaneous albinism and oculocutaneous albinism type III.

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 (HGNC:12450)
Target/Specificity	Pigment cells.

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

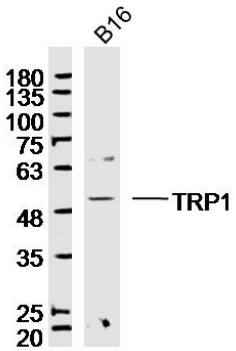
Protein Information

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

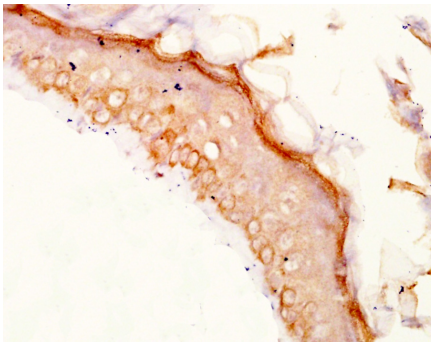
TRP1 is a melanosomal enzyme that belongs to the tyrosinase family and plays an important role in the melanin biosynthetic pathway. Defects in this gene are the cause of rufous oculocutaneous albinism and oculocutaneous albinism type III.

Images



Sample: B16 (Mouse)cell Lysate at 40 ug
Primary: Anti-TRP1(AP56026) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 58 kD
Observed band size: 55 kD

Paraformaldehyde-fixed, paraffin embedded (Human skin); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Tyrosinase-related protein 1) Polyclonal Antibody, Unconjugated (AP56026) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody



(sp-0023) for 20 minutes and DAB staining.