

# TRP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56026

### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rat, Bovine
Host
Rabbit
Clonality
Polyclonal
Calculated MW
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, CAS2 {ECO:0000303 | PubMed:1906272},

TYRP, TYRRP

Target/Specificity Pigment cells.

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**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).

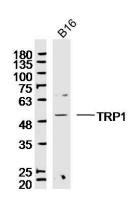
**Cellular Location** Melanosome membrane {ECO:0000250 | UniProtKB:P07147}; Single-pass type

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.

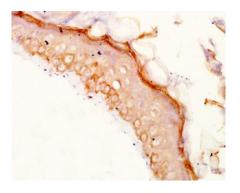
## **Images**



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.

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