

Tyrosinase Antibody (C-term) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7345B

Specification

Tyrosinase Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region FC, IF, IHC-P, WB,E <u>P14679</u> Human Rabbit Polyclonal Rabbit IgG 486-513

Tyrosinase Antibody (C-term) - Additional Information

Gene ID 7299

Other Names Tyrosinase, LB24-AB, Monophenol monooxygenase, SK29-AB, Tumor rejection antigen AB, TYR

Target/Specificity

This Tyrosinase antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 486-513 amino acids from the C-terminal region of human Tyrosinase.

Dilution $FC \sim 1:10 \sim 50$ $IF \sim 1:10 \sim 50$ $IHC-P \sim 1:10 \sim 50$ $WB \sim 1:1000$ $E \sim -$ Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Tyrosinase Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Tyrosinase Antibody (C-term) - Protein Information

Name TYR (<u>HGNC:12442</u>)



Function This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the initial and rate limiting step in the cascade of reactions leading to melanin production from tyrosine (By similarity). In addition to hydroxylating tyrosine to DOPA (3,4- dihydroxyphenylalanine), also catalyzes the oxidation of DOPA to DOPA- quinone, and possibly the oxidation of DHI (5,6-dihydroxyindole) to indole-5,6 quinone (PubMed:<u>28661582</u>).

Cellular Location

Melanosome membrane; Single-pass type I membrane protein. Melanosome {ECO:0000250|UniProtKB:P11344}. Note=Proper trafficking to melanosome is regulated by SGSM2, ANKRD27, RAB9A, RAB32 and RAB38 {ECO:0000250|UniProtKB:P11344}

Tyrosinase Antibody (C-term) - 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>

Tyrosinase Antibody (C-term) - Images



Confocal immunofluorescent analysis of Tyrosinase Antibody (C-term)(Cat#AP7345b) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).





Western blot analysis of Tyrosinase antibody (C-term) (Cat. #AP7345b) in HepG2 cell line lysates (35ug/lane). Tyrosinase (arrow) was detected using the purified Pab.



Tyrosinase Antibody (C-term) (AP7345b)immunohistochemistry analysis in formalin fixed and paraffin embedded human skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Tyrosinase Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





Tyrosinase Antibody (C-term) (Cat. #AP7345b) flow cytometric analysis of A375 cells (right histogram) compared to a negative control (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Tyrosinase Antibody (C-term) - Background

TYR catalyzes the first 2 steps, and at least 1 subsequent step, in the conversion of tyrosine to melanin. The protein has both tyrosine hydroxylase and dopa oxidase catalytic activities, and requires copper for function. Mutations in this protein result in oculocutaneous albinism, and nonpathologic polymorphisms result in skin pigmentation variation.

Tyrosinase Antibody (C-term) - References

Ostankovitch, M. J. Immunol. 182 (8), 4830-4835 (2009) Chintamaneni, C.D. Proc. Natl. Acad. Sci. U.S.A. 88 (12), 5272-5276 (1991)