
Product Name: TYR Rabbit Polyclonal Antibody**Catalog #: APRab19467**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	80kDa

Antigen Information

Gene Name	TYR
Alternative Names	TYR; Tyrosinase; LB24-AB; Monophenol monooxygenase; SK29-AB; Tumor rejection antigen AB
Gene ID	7299.0
SwissProt ID	P14679
Immunogen	The antiserum was produced against synthesized peptide derived from human Tyrosinase. AA range:471-520

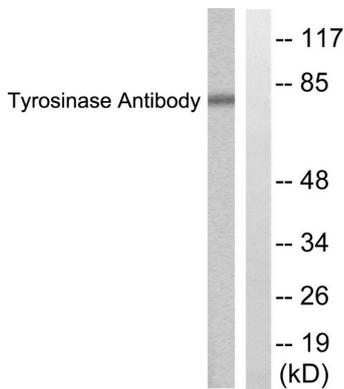
Background

tyrosinase(TYR) Homo sapiens The enzyme encoded by this gene catalyzes the first 2 steps, and at least 1 subsequent step, in the conversion of tyrosine to melanin. The enzyme has both tyrosine hydroxylase and dopa oxidase catalytic activities, and requires copper for function. Mutations in this gene result in oculocutaneous albinism, and nonpathologic polymorphisms result in skin pigmentation variation. The human genome contains a pseudogene similar to the 3' half of this gene. [provided by RefSeq, Oct 2008],catalytic activity:L-tyrosine + L-dopa + O(2) = L-dopa + dopaquinone + H(2)O.,cofactor:Binds 2 copper ions per subunit.,disease:Defects in TYR are the cause of oculocutaneous albinism type I temperature-sensitive (OCA-ITS) [MIM:606952]. OCA-ITS patients have white axillary and scalp hair and pigmented arm and leg hair.,disease:Defects in TYR are the cause of oculocutaneous albinism type IA (OCA-IA) [MIM:203100]. OCA-I, also known as tyrosinase negative oculocutaneous albinism, is an autosomal recessive disorder characterized by absence of pigment in hair, skin and eyes. OCA-I is divided into 2 types: type IA, characterized by complete lack of tyrosinase activity due to production of an inactive enzyme, and type IB characterized by reduced activity of tyrosinase. OCA-IA patients presents with the life-long absence of melanin pigment after birth and manifest increased sensitivity to ultraviolet radiation and to predisposition to skin cancer.,disease:Defects in TYR are the cause of oculocutaneous albinism type IB (OCA-IB) [MIM:606952]; also known as albinism yellow mutant type. OCA-IB patients have white hair at birth that rapidly turns yellow or blond. They manifest the development of minimal-to-moderate amounts of cutaneous and ocular pigment.,function:This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the rate-limiting conversions of tyrosine to DOPA, DOPA to DOPA-quinone and possibly 5,6-dihydroxyindole to indole-5,6 quinone.,induction:Increased expression after UV-B radiation.,online information:Retina International's Scientific Newsletter,online information:Snowy stardom - Issue 49 of August 2004,online information:TYR mutations,online information:Tyrosinase entry,polymorphism:Compound heterozygosity for the R402Q polymorphism and a mutant allele of TYR is a common cause of autosomal recessive ocular albinism. The R402Q polymorphism is also found in Waardenburg syndrome type II with ocular albinism (WS2-OA) in association with a deletion in the MITF gene.,polymorphism:Genetic variations in TYR are associated with skin/hair/eye pigmentation type 3 (SHEP3) [MIM:601800]. Hair, eye and skin pigmentation are among the most visible examples of human phenotypic variation, with a broad normal range that is subject to substantial geographic stratification. In the case of skin, individuals tend to have lighter pigmentation with increasing distance from the equator. By contrast, the majority of variation in human eye and hair color is found among individuals of European ancestry, with most other human populations fixed for brown eyes and black hair.,similarity:Belongs to the tyrosinase family,.

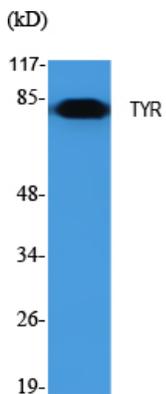
Research Area

Tyrosine metabolism;Riboflavin metabolism;Melanogenesis;

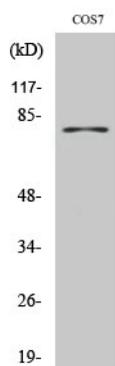
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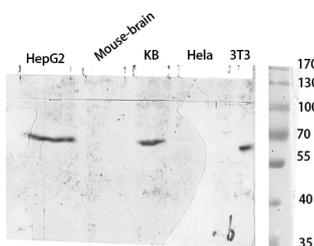
Western blot analysis of lysates from COS7 cells, treated with UV 30 ' , using Tyrosinase Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using TYR Polyclonal Antibody. Secondary antibody was diluted at 1:20000



Western Blot analysis of COS7 cells using TYR Polyclonal Antibody. Secondary antibody was diluted at 1:20000



Western blot analysis of various cell Lysate, antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000