Tyrosinase (ABT-TYR) Mouse mAb

Catalog No	YP-mAb-15342
Isotype	IgA,Kappa
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	TYR
Protein Name	ATN;CMM8;LB24 AB;LB24-AB;Monophenol monooxygenase;OCA1;OCA1A;OCAIA;Oculocutaneous albinism IA;SHEP3;SK29 AB;SK29-AB;Tumor rejection antigen AB;TYR;TYRO_HUMAN;tyrosinase (oculocutaneous albinism IA);Tyrosinase
Immunogen	Synthesized peptide derived from human Tyrosinase AA range: 250-350
Specificity	This antibody detects endogenous levels of Tyrosinase protein.
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Mouse,IgG
Purification	Protein G
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATN ; CMM8 ; LB24 AB ; LB24-AB ; Monophenol monooxygenase ; OCA1 ; OCA1A ; OCAIA ; Oculocutaneous albinism IA ; SHEP3 ; SK29 AB ; SK29-AB ; Tumor rejection antigen AB ; TYR ; TYRO_HUMAN ; tyrosinase ; oculocutaneous albinism IA ; Tyrosinase
Observed Band	50-80kD
Calculated Molecular Weight	60kD
Cell Pathway	Cytoplasmic
Tissue Specificity	Skin
Function	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 associa (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.,
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.
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images