SunLong Biotech Co.,LTD
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Rabbit Anti-Tyrosinase antibody

SL0819R

Product Name	Tyrosinase
Chinese Name	酪氨酸酶抗体
Alias	LB24 AB; LB24-AB; Monophenol monooxygenase; SK29 AB; Tumor rejection antigen AB; LB24 AB; Monophenol monooxygenase; OCA1A; OCAIA; Oculocutaneous albinism IA; SK29 AB; SK29-AB; Tumor rejection antigen AB; TYR; tyrosinase (oculocutaneous albinism IA); TYRO_HUMAN.
Research Area	Tumour immunology Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Sheep,)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	56kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Tyrosinase: 155-250/529
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed

Product Detail

Tyrosinase is the key enzyme for melanin,synthesis in mammalian melanocytes and has been considered to be a unique marker for the study of melanocyte differentiation. A cDNA library was constructed from poly(A)+ mRNA from mouse melanocytes and screened using anti- tyrosinase antiserum and oligonucleotide probes corresponding to amino acid sequence of tyrosinase. sequencing of some cDNA clones positive in these screenings gave a nucleotide sequence of 1838 nucleotides including a open reading frame of 1344 nucleotides that was found to correspond exactly to the amino acid sequence of the cyanogen bromide fragments of tyrosinase.

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.

Subcellular Location:
Melanosome membrane; Single-pass type I membrane protein.

DISEASE:
Defects in TYR are the cause of albinism oculocutaneous type 1A (OCA1A) [MIM:203100]; also known as tyrosinase negative oculocutaneous albinism. An autosomal recessive disorder in which the biosynthesis of melanin pigment is absent in skin, hair, and eyes. It is characterized by complete lack of tyrosinase activity due to production of an inactive enzyme. Patients present with a life-long absence of melanin pigment after birth, and manifest increased sensitivity to ultraviolet radiation with predisposition to skin cancer. Visual anomalies include decreased acuity, nystagmus, strabismus and photophobia.
Defects in TYR are the cause of albinism oculocutaneous type 1B (OCA1B) [MIM:606952]; also known as albinism yellow mutant type. An autosomal recessive disorder in which the biosynthesis of melanin pigment is reduced in skin, hair, and eyes. It is characterized by partial lack of tyrosinase activity. 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. Some patients may have with white hair in the warmer areas (scalp and axilla) and progressively darker hair in the cooler areas (extremities). This variant phenotype is due to a loss of tyrosinase activity above 35-37 degrees C.

Similarity:
Belongs to the tyrosinase family.

SWISS:
P14679

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Gene ID:
7299

Database links:

Entrez Gene: 7299 Human

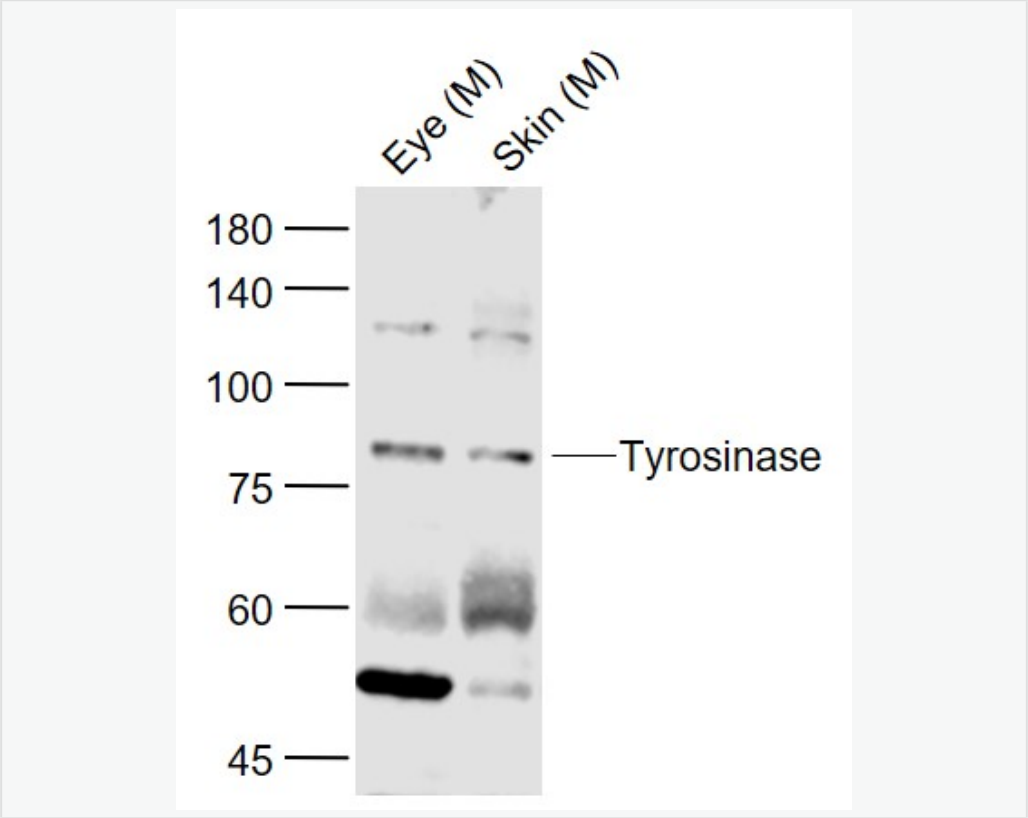
Omim: 606933 Human

SwissProt: P14679 Human

Unigene: 503555 Human

酪氨酸酶(Tyrosinase) 又称酚氧化酶、多酚氧化酶、儿茶酚氧化酶,是结构复杂的多亚基的含铜氧化还原酶,广泛存在于微生物、动 Botany 及人体中。酪氨酸酶具有独特的双重催化功能,是生物体内黑色素合成的关键酶,与人的衰老,Insect 的伤口愈合与发育,果蔬的褐变有密切关系。多年来,酪氨酸酶一直受到国内外的关注,其研究涉及生物、医学、农学、化学、药学等多个学科和领域.酪氨酸酶作为黑色素合成的关键酶,其异常过量表达可导致人体的色素沉着性疾病。

Product Picture



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Sample:

Lane 1: Eye (Mouse) Lysate at 40 ug

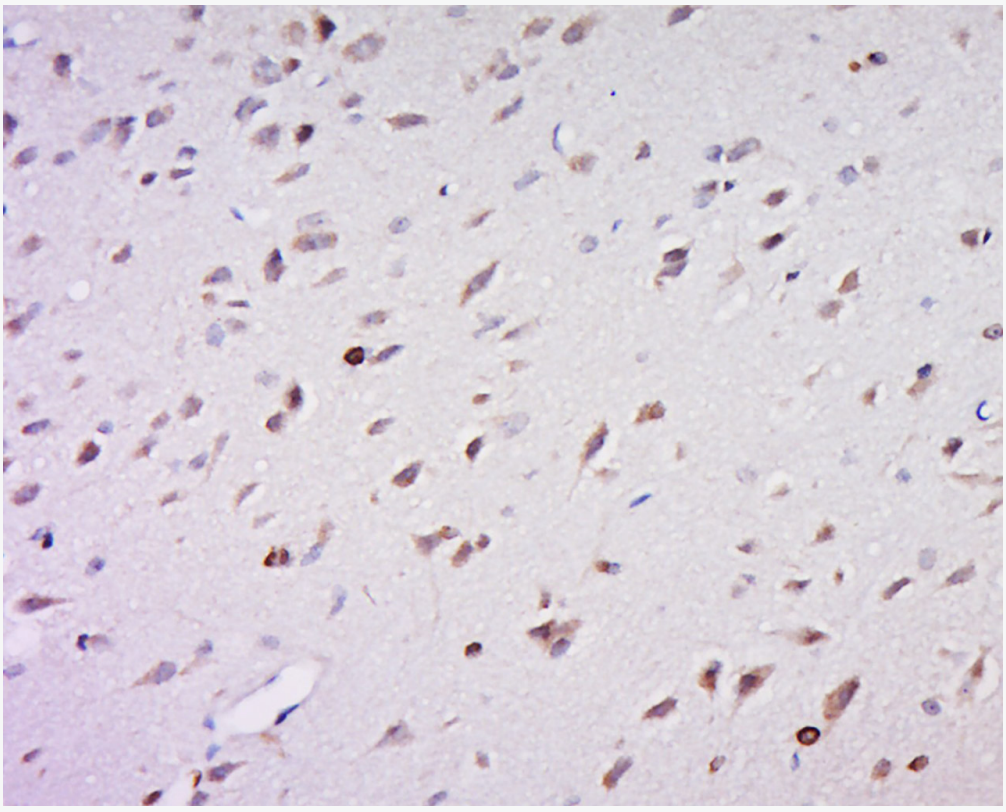
Lane 2: Skin (Mouse) Lysate at 40 ug

Primary: Anti-Tyrosinase (SL0819R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 80 kD

Observed band size: 80 kD



Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and

paraffin-embedded;

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Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min;

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-yrosinase Polyclonal Antibody, Unconjugated(SL0819R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining