

Rabbit Anti-P protein antibody

SL17583R

Product Name:	P protein
Chinese Name:	黑素细胞特异性Transporter抗体
Alias:	BEY; BEY1; BEY2; BOCA; D15S12; EYCL; EYCL2; EYCL3; eye color 2 (central brown); eye color 3 (brown); hair color 3 (brown); HCL3; Melanocyte-specific transporter protein; OCA2; oculocutaneous albinism II; oculocutaneous albinism II (pink-eye dilution homolog, mouse); P; P protein; P_HUMAN; PED; Pink eyed dilution protein homolog; Pink-eyed dilution protein homolog; SHEP1; total brown iris pigmentation.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	93kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human P protein:451-550/838 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes the human homologue of the mouse p (pink-eyed dilution) gene. The

encoded protein is believed to be an integral membrane protein involved in small molecule transport, specifically tyrosine - a precursor of melanin. Mutations in this gene result in type 2 oculocutaneous albinism. [provided by RefSeq, Jul 2008]

Function:

Could be involved in the transport of tyrosine, the precursor to melanin synthesis, within the melanocyte. Regulates the pH of melanosome and the melanosome maturation. One of the components of the mammalian pigmentary system. Seems to regulate the post-translational processing of tyrosinase, which catalyzes the limiting reaction in melanin synthesis. May serve as a key control point at which ethnic skin color variation is determined. Major determinant of brown and/or blue eye color.

Subcellular Location:

Melanosome membrane.

DISEASE:

Defects in OCA2 are the cause of albinism oculocutaneous type 2 (OCA2) [MIM:203200]. An autosomal recessive disorder in which the biosynthesis of melanin pigment is reduced in skin, hair, and eyes. Although affected infants may appear at birth to have complete absence of melanin pigment, most patients acquire small amounts of pigment with age. Visual anomalies include decreased acuity and nystagmus. The phenotype is highly variable. The hair of affected individuals may turn darker with age, and pigmented nevi or freckles may be seen. African and African American individuals may have yellow hair and blue-gray or hazel irides. One phenotypic variant, 'brown OCA,' has been described in African and African American populations and is characterized by light brown hair and skin color and gray to tan irides.

Similarity:

Belongs to the CitM (TC 2.A.11) transporter family.

SWISS:

O04671

Gene ID:

4948

Database links:

Entrez Gene: 488683 Dog

Entrez Gene: 100724327 Guinea pig

Entrez Gene: 100034107 Horse

Entrez Gene: 4948 Human

Entrez Gene: 18431 Mouse

Entrez Gene: 397171 Pig

Entrez Gene: 24606 Rat

Entrez Gene: 567419 Zebrafish

Omim: 611409 Human

SwissProt: Q04671 Human

SwissProt: Q62052 Mouse

SwissProt: Q8MIQ9 Pig

Unigene: 654411 Human

Unigene: 137052 Mouse

Important Note:

NNWSUR

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