10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRALBP Rabbit pAb

Catalog # AP97391

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P12271
Other Accession	P12271
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36474
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CRALBP
Epitope Specificity	11-110/317
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 CRAL-TRIO domain.
DISEASE	Defects in RLBP1 are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. Defects in RLBP1 are the cause of Bothnia retinal dystrophy (BRD) [MIM:607475]; also known as Vasterbotten dystrophy. Affected individuals show night blindness from early childhood with features consistent with retinitis punctata albescens and macular degeneration. Defects in RLBP1 are the cause of rod-cone dystrophy Newfoundland (NFRCD) [MIM:607476]. NFRCD is a retinal dystrophy reminiscent of retinitis punctata albescens but with a substantially lower age at onset and more-rapid and distinctive progression. Rod-cone dystrophies results from initial loss of rod photoreceptors, later followed by cone photoreceptors loss. Defects in RLBP1 are a cause of fundus albipunctatus (FA) [MIM:136880]. FA is a rare form of stationary night blindness characterized by a delay in the regeneration of cone and rod photopigments.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a 36-kD water-soluble protein which carries 11-cis-retinaldehyde or 11-cis-retinal as physiologic ligands. It may be a functional component of the visual cycle. Mutations of this gene have been associated with severe rod-cone dystrophy, Bothnia dystrophy (nonsyndromic autosomal recessive retinitis pigmentosa) and retinitis punctata albescens. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	6017

Other Names	CRALBP; 3110056M11Rik; RLBP1_HUMAN; RLBP1; Cellular retinaldehyde-binding protein; RLBP1_MOUSE; retinaldehyde binding protein 1; retinaldehyde-binding protein 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	RLBP1
Synonyms	CRALBP
Function	Soluble retinoid carrier essential the proper function of both rod and cone photoreceptors. Participates in the regeneration of active 11-cis-retinol and 11-cis-retinaldehyde, from the inactive 11- trans products of the rhodopsin photocycle and in the de novo synthesis of these retinoids from 11-trans metabolic precursors. The cycling of retinoids between photoreceptor and adjacent pigment epithelium cells is known as the 'visual cycle'.
Cellular Location	Cytoplasm.
Tissue Location	Retina and pineal gland. Not present in photoreceptor cells but is expressed abundantly in the adjacent retinal pigment epithelium (RPE) and in the Mueller glial cells of the retina

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.