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RBP3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17803c

Product Information

Application	WB, E
Primary Accession	P10745
Other Accession	P49194, NP_002891.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37055
Calculated MW	135363
Antigen Region	784-811

Additional Information

Gene ID	5949
Other Names	Retinol-binding protein 3, Interphotoreceptor retinoid-binding protein, IRBP, Interstitial retinol-binding protein, RBP3
Target/Specificity	This RBP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 784-811 amino acids from the Central region of human RBP3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RBP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RBP3 (HGNC:9921)
Function	Mediates the transport of 11-cis- and all-trans-retinoids between the retinal pigment epithelium (RPE) and photoreceptors, facilitating retinoid exchange

	required for the visual cycle.
Cellular Location	Secreted, extracellular space, extracellular matrix, interphotoreceptor matrix. Note=Interphotoreceptor matrix that permeates the space between the retina and the contiguous layer of pigment epithelium cells

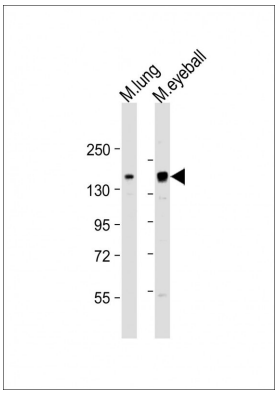
Background

Interphotoreceptor retinol-binding protein is a large glycoprotein known to bind retinoids and found primarily in the interphotoreceptor matrix of the retina between the retinal pigment epithelium and the photoreceptor cells. It is thought to transport retinoids between the retinal pigment epithelium and the photoreceptors, a critical role in the visual process.The human IRBP gene is approximately 9.5 kbp in length and consists of four exons separated by three introns. The introns are 1.6-1.9 kbp long. The gene is transcribed by photoreceptor and retinoblastoma cells into an approximately 4.3-kilobase mRNA that is translated and processed into a glycosylated protein of 135,000 Da. The amino acid sequence of human IRBP can be divided into four contiguous homology domains with 33-38% identity, suggesting a series of gene duplication events. In the gene, the boundaries of these domains are not defined by exon-intron junctions, as might have been expected. The first three homology domains and part of the fourth are all encoded by the first large exon, which is 3,180 base pairs long. The remainder of the fourth domain is encoded in the last three exons, which are 191, 143, and approximately 740 base pairs long, respectively.

References

Garcia-Ramirez, M., et al. Diabetologia 52(12):2633-2641(2009)
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Jin, M., et al. J. Neurosci. 29(5):1486-1495(2009)
Descamps, F.J., et al. J. Cell. Mol. Med. 12 (6A), 2449-2456 (2008) :
Howard, O.M., et al. Blood 105(11):4207-4214(2005)

Images



All lanes : Anti-RBP3 Antibody (Center) at 1:2000 dilution Lane 1: mouse lung lysate Lane 2: mouse eyeball lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 135 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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