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RBP3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RBP3.
Catalog # AT3600a

Product Information

Application	WB, E
Primary Accession	P10745
Other Accession	NM_002900
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4F3
Calculated MW	135363

Additional Information

Gene ID	5949
Other Names	Retinol-binding protein 3, Interphotoreceptor retinoid-binding protein, IRBP, Interstitial retinol-binding protein, RBP3
Target/Specificity	RBP3 (NP_002891, 1149 a.a. ~ 1246 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	RBP3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

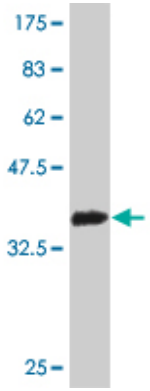
Interphotoreceptor retinol-binding protein is a large glycoprotein known to bind retinoids and found primarily in the interphotoreceptor matrix of the retina between the retinal pigment epithelium and the photoreceptor cells. It is thought to transport retinoids between the retinal pigment epithelium 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.

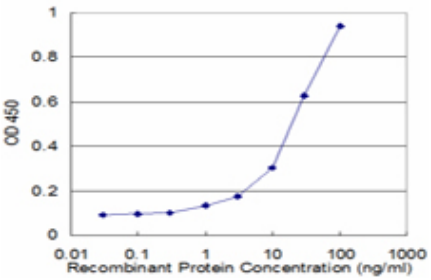
References

Interphotoreceptor retinoid-binding protein (IRBP) is downregulated at early stages of diabetic retinopathy. Garcia-Ram?rez M, et al. Diabetologia, 2009 Dec. PMID 19823802.The role of interphotoreceptor retinoid-binding protein on the translocation of visual retinoids and function of cone photoreceptors. Jin M, et al. J Neurosci, 2009 Feb 4. PMID 19193895.A homozygous missense mutation in the IRBP gene (RBP3) associated with autosomal recessive retinitis pigmentosa. den Hollander AI, et al. Invest Ophthalmol Vis Sci, 2009 Apr. PMID 19074801.Interphotoreceptor retinoid-binding protein as biomarker in systemic autoimmunity with eye inflictions. Descamps FJ, et al. J Cell Mol Med, 2008 Dec. PMID 18266969.Autoantigens signal through chemokine receptors: uveitis antigens induce CXCR3- and CXCR5-expressing lymphocytes and immature dendritic cells to migrate. Howard OM, et al. Blood, 2005 Jun 1. PMID 15713799.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .



Detection limit for recombinant GST tagged RBP3 is approximately 1ng/ml as a capture antibody.

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