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RBP3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17803c

Specification

RBP3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P10745

RBP3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 5949

Other Names
Retinol-binding protein 3, Interphotoreceptor retinoid-binding protein, IRBP, Interstitial retinol-binding protein, RBP3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RBP3 Antibody (Center) Blocking Peptide - Protein Information

Name RBP3

Function
IRBP shuttles 11-cis and all trans retinoids between the retinol isomerase in the pigment epithelium and the visual pigments in the photoreceptor cells of the retina.

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

RBP3 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

RBP3 Antibody (Center) Blocking Peptide - Images

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RBP3 Antibody (Center) Blocking Peptide - Background

Interphotoreceptor retinol-binding protein is a largeglycoprotein known to bind retinoids and found primarily in theinterphotoreceptor matrix of the retina between the retinal pigmentepithelium and the photoreceptor cells. It is thought to transportretinoids between the retinal pigment epithelium and thephotoreceptors, a critical role in the visual process.The humanIRBP gene is approximately 9.5 kbp in length and consists of fourexons separated by three introns. The introns are 1.6-1.9 kbp long.The gene is transcribed by photoreceptor and retinoblastoma cellsinto an approximately 4.3-kilobase mRNA that is translated andprocessed into a glycosylated protein of 135,000 Da. The amino acidsequence of human IRBP can be divided into four contiguous homologydomains with 33-38% identity, suggesting a series of geneduplication events. In the gene, the boundaries of these domainsare not defined by exon-intron junctions, as might have beenexpected. The first three homology domains and part of the fourthare all encoded by the first large exon, which is 3,180 base pairslong. The remainder of the fourth domain is encoded in the lastthree exons, which are 191, 143, and approximately 740 base pairslong, respectively.

RBP3 Antibody (Center) Blocking Peptide - References

Garcia-Ramirez, M., et al. Diabetologia 52(12):2633-2641(2009)den Hollander, A.I., et al. Invest. Ophthalmol. Vis. Sci. 50(4):1864-1872(2009)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)