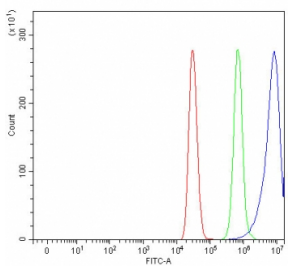
IRBP Antibody / RBP3 / Retinol-binding protein 3 (RQ7792)

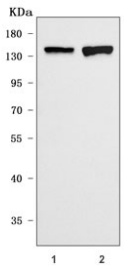
Catalog No.	Formulation	Size
RQ7792	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P10745
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This IRBP antibody is available for research use only.



Flow cytometry testing of human MCF7 cells with IRBP antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= IRBP antibody.



Western blot testing of 1) rat eye and 2) mouse eye tissue lysate with IRBP antibody. Predicted molecular weight ~135 kDa.

Description

Retinol-binding protein 3, interstitial (RBP3), also known as IRBP (Interphotoreceptor retinol-binding protein), is a protein that in humans is encoded by the RBP3 gene. 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.

Application Notes

Optimal dilution of the IRBP antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids L333-R1196) was used as the immunogen for the IRBP antibody.

Storage

After reconstitution, the IRBP antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.