

For Research Use Only

# RBP4 Polyclonal antibody

Catalog Number: 11774-1-AP

Featured Product

21 Publications



## Basic Information

<b>Catalog Number:</b> 11774-1-AP	<b>GenBank Accession Number:</b> BC020633	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 600 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5950	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:250-1:1000 IF-P 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02753	
<b>Isotype:</b> IgG	<b>Full Name:</b> retinol binding protein 4, plasma	
<b>Immunogen Catalog Number:</b> AG2448	<b>Calculated MW:</b> 201 aa, 23 kDa	
	<b>Observed MW:</b> 23 kDa	

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, geese, camelus bactrianus

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** human blood, HepG2 cells, rat liver tissue, human plasma

**IHC:** mouse eye tissue, human liver cancer tissue, mouse liver tissue

**IF-P:** mouse eye tissue,

## Background Information

RBP4 (retinol-binding protein 4) is a carrier protein that transports vitamin A (retinol) from the liver to the peripheral tissues. Synthesized primarily by hepatocytes and adipocytes as a 21 kDa non-glycosylated protein, RBP4 is secreted into the circulation as a retinol-RBP4 complex. In plasma the RBP4-retinol complex is bound to transthyretin (TRR), which prevents kidney filtration. Two truncated forms of RBP4, RBP4-L (truncated at Leu-183) and RBP4-LL (truncated at Leu-182 and Leu-183), exist by proteolytic process. RBP4-L and RBP4-LL, which do not bind TTR, are normally excreted into the urine but accumulate in the serum during renal failure. Urinary RBP4 has been reported as marker for glomerular disease. RBP4 also was identified as an adipokine that elevated in some INS-resistant states. Measurement of serum RBP4 could be used to assess the risk of INS resistance, type 2 diabetes, obesity, and cardiovascular disease. (18752671, 16034410)

## Notable Publications

Author	Pubmed ID	Journal	Application
Makoto Hirano	27773703	Biochim Biophys Acta	WB,IF
Shyi-Jang Shin	33065162	Metabolism	WB,IHC
Na Sun	33102941	Bioact Mater	WB,IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

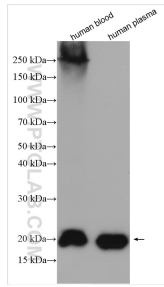
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

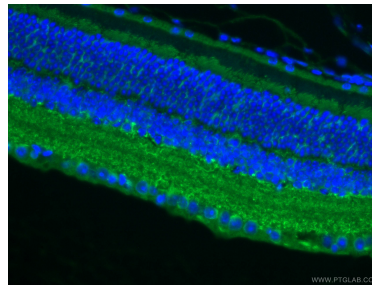
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

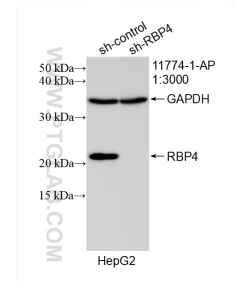
## Selected Validation Data



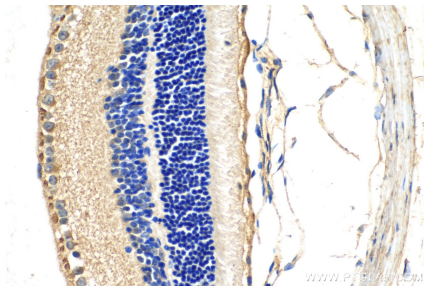
Various lysates were subjected to SDS PAGE followed by western blot with 11774-1-AP (RBP4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse eye tissue using RBP4 antibody (11774-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



WB result of RBP4 antibody (11774-1-AP; 1:1500; incubated at room temperature for 1.5 hours) with sh-Control and sh-RBP4 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 11774-1-AP (RBP4 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).