For Research Use Only

RBP4 Polyclonal antibody

Catalog Number: 11774-1-AP

Featured Product

19 Publications



Basic Information

Catalog Number: 11774-1-AP

Size: 600 µg/ml GenBank Accession Number: BC020633 GeneID (NCBI): 5950

Source: Full Name:
Rabbit retinol binding protein 4, plasma

Isotype:Calculated MW:IgG201 aa, 23 kDaImmunogen Catalog Number:Observed MW:AG244823 kDa

Purification Method: Antigen affinity purification

Recommended Dilutions: WB 1:1000-1:6000 IHC 1:250-1:1000

IF 1:50-1:500

Applications

Tested Applications: IF, IHC, WB, ELISA Cited Applications: CoIP, IF, IHC, WB

Species Specificity: human, mouse, rat

Cited Species:

human, rat, geese, mouse, 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

IHC: mouse eye tissue, human liver cancer tissue,

mouse liver tissue

IF: 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:

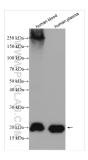
Store at -20°C. Stable for one year after shipment.

Storage Buffer

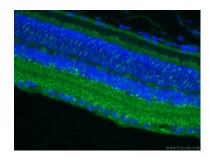
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

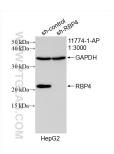
Selected Validation Data



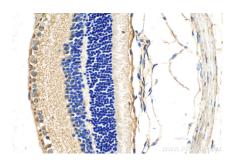
Various lysates were subjected to SDS PAGE followed by western blot with 11774-1-AP (RBP4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse eye tissue using RBP4 antibody (11774-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure 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 paraffinembedded 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).