

#### **RBP4 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1547a

# **Specification**

### **RBP4 Antibody - Product Information**

Application E, WB, IHC, IF, FC

Primary Accession
Reactivity
Host
Clonality
Isotype

P02753
Human
Mouse
Monoclonal
IgG1

Calculated MW 23kDa KDa

**Description** 

This protein belongs to the lipocalin family and is the specific carrier for retinol (vitamin A alcohol) in the blood. It delivers retinol from the liver stores to the peripheral tissues. In plasma, the RBP-retinol complex interacts with transthyretin which prevents its loss by filtration through the kidney glomeruli. A deficiency of vitamin A blocks secretion of the binding protein posttranslationally and results in defective delivery and supply to the epidermal cells. (provided by RefSeg)

#### **Immunogen**

Purified recombinant fragment of human RBP expressed in E. Coli.

## **Formulation**

Ascitic fluid containing 0.03% sodium azide.

### **RBP4 Antibody - Additional Information**

## **Gene ID 5950**

#### **Other Names**

Retinol-binding protein 4, Plasma retinol-binding protein, PRBP, RBP, Plasma retinol-binding protein(1-182), Plasma retinol-binding protein(1-181), Plasma retinol-binding protein(1-179), Plasma retinol-binding protein(1-176), RBP4

#### **Dilution**

E~~1/10000 WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

RBP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



## **RBP4 Antibody - Protein Information**

#### Name RBP4

# **Function**

Retinol-binding protein that mediates retinol transport in blood plasma (PubMed:<a href="http://www.uniprot.org/citations/5541771" target="\_blank">5541771</a>). Delivers retinol from the liver stores to the peripheral tissues (Probable). Transfers the bound all-trans retinol to STRA6, that then facilitates retinol transport across the cell membrane (PubMed:<a href="http://www.uniprot.org/citations/22665496" target=" blank">22665496</a>).

#### **Cellular Location**

Secreted

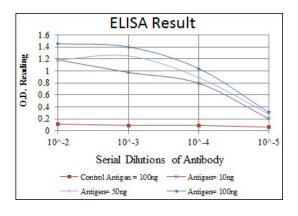
#### **Tissue Location**

Detected in blood plasma and in urine (at protein level).

# **RBP4 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





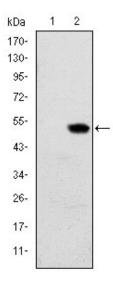


Figure 1: Western blot analysis using RBP4 mAb against HEK293 (1) and RBP4(AA: 1-201)-hlgGFc transfected HEK293 (2) cell lysate.

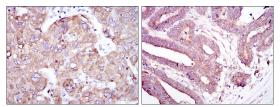


Figure 2: Immunohistochemical analysis of paraffin-embedded liver cancer tissues (left) and stomach cancer tissues (right) using RBP4 mouse mAb with DAB staining.

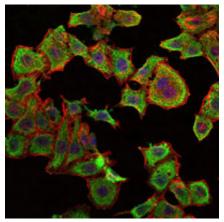
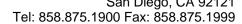


Figure 3: Immunofluorescence analysis of HepG2 cells using RBP4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.





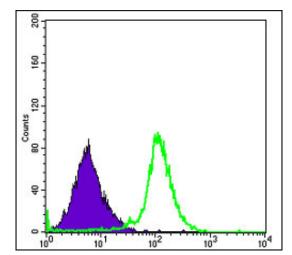


Figure 4: Flow cytometric analysis of HepG2 cells using RBP4 mouse mAb (green) and negative control (purple).

# **RBP4 Antibody - References**

1. Diabetologia. 2008 Aug;51(8):1423-8. 2. J Clin Endocrinol Metab. 2008 Aug;93(8):3142-8.