10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

RBP4 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1547a

Specification

RBP4 Antibody - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	P02753
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**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 RefSeq)

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
WB~~1/500 - 1/2000
IHC~~1/500 - 1/2000
FC~~1/200 - 1/400
ICC~~N/A
E~~1/10000

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.

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RBP4 Antibody - Protein Information

Name RBP4

Function
Retinol-binding protein that mediates retinol transport in blood plasma (PubMed:5541771). 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:22665496).

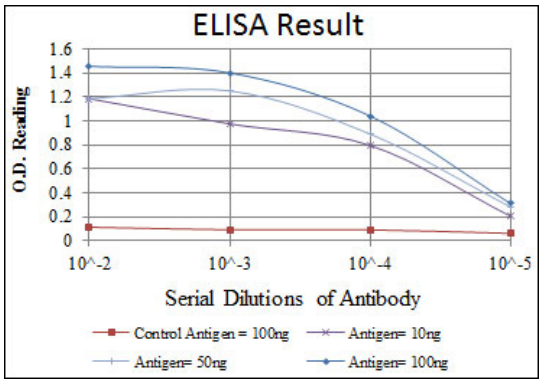
Cellular Location
Secreted

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



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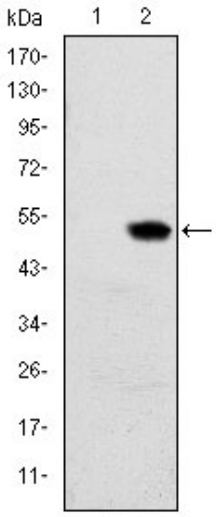

Figure 1: Western blot analysis using RBP4 mAb against HEK293 (1) and RBP4(AA: 1-201)-hIgGFc transfected HEK293 (2) cell lysate.

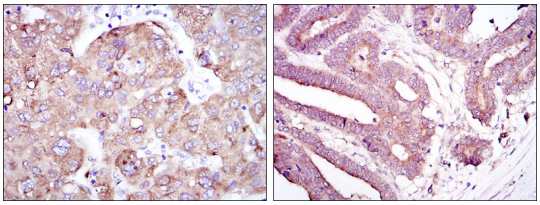

Figure 2: Immunohistochemical analysis of paraffin-embedded liver cancer tissues (left) and stomach cancer tissues (right) using RBP4 mouse mAb with DAB staining.

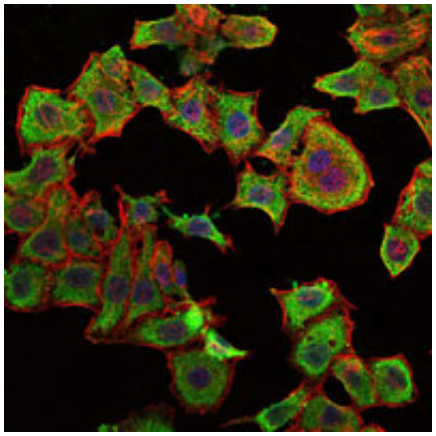

Figure 3: Immunofluorescence analysis of HepG2 cells using RBP4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

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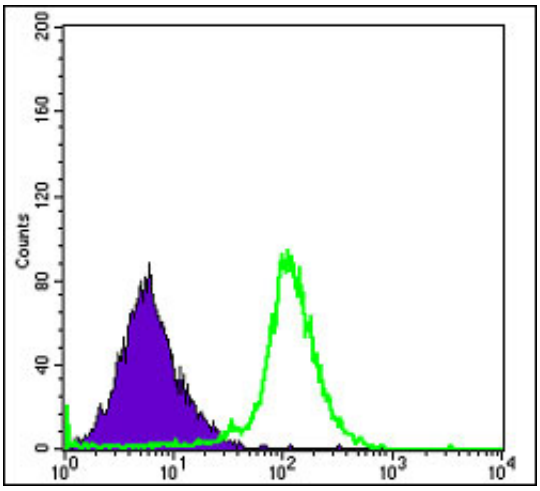

Figure 4: Flow cytometric analysis of HepG2 cells using RBP4 mouse mAb (green) and negative control (purple).

RBP4 Antibody - References

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