10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RBP4 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1547a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P02753
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4C2
Isotype	IgG1
Calculated MW	23010
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.

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.

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).

References

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

Images

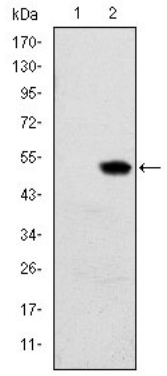

Figure 1: Western blot analysis using RBP4 mAb against HEK293 (1) and RBP4(AA: 1-201)-hIgGFc transfected HEK293 (2) cell lysate.

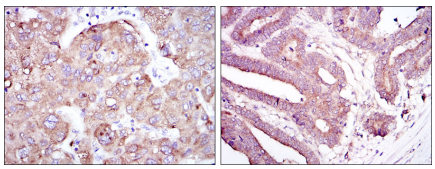

Figure 2: Immunohistochemical analysis of paraffin-embedded liver cancer tissues (left) and stomach cancer tissues (right) using RBP4 mouse mAb with DAB staining.

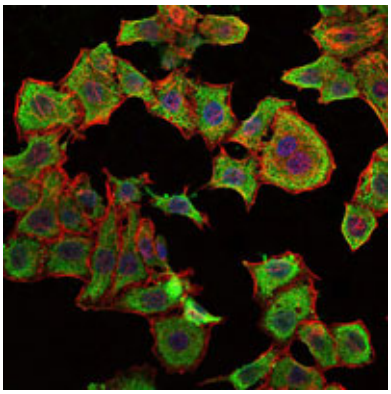

Figure 3: Immunofluorescence analysis of HepG2 cells using RBP4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

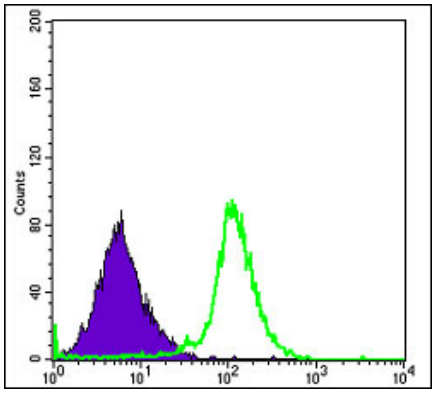

Figure 4: Flow cytometric analysis of HepG2 cells using RBP4 mouse mAb (green) and negative control (purple).