Datasheet for ABIN967847

anti-RBP4 antibody (AA 1-135)

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Overview

Quantity:	50 µg
Target:	RBP4
Binding Specificity:	AA 1-135
Reactivity:	Human, Mouse, Rat, Chicken, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RBP4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	Human RBP aa. 1-135
Clone:	42-RBP
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine), Chicken, Mouse (Murine), Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	RBP4
Alternative Name:	RBP (RBP4 Products)
Background:	Retinol, a metabolic precursor of retinal and retinoic acid, is transported in plasma bound to a carrier protein known as retinol-binding protein (RBP). RBP is the only retinoid-specific binding protein that has been identified in plasma. The presence of RBP increases the stability of retinol as it is transported from its stores to target cells. In plasma, the 21 kDa RBP forms a tight complex with thyroxine-binding transthyretin (TTR), a homotetramer of about 55 kDa. Association of RBP with TTR increases the stability of the retinol-RBP complex. It is believed that this association prevents filtration of the relatively small RBP through the kidney glomeruli. Once retinol is delivered to its target cells, the resulting retinol-free RBP has a reduced affinity for TTR and thus can be selectively cleared from the circulation by filtration through kidney glomeruli. The three dimensional structures of human and bovine RBP have been compared and appear to be very similar.
Molecular Weight:	21 kDa
Pathways:	Regulatory RNA Pathways, Positive Regulation of Peptide Hormone Secretion, Carbohydrate Homeostasis, Production of Molecular Mediator of Immune Response

Application Details

Comment:	Related Products: ABIN967389, ABIN968619
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:

Christensen, Moskaug, Vorum, Jacobsen, Gundersen, Nykjaer, Blomhoff, Willnow, Moestrup: " Evidence for an essential role of megalin in transepithelial transport of retinol." in: **Journal of the American Society of Nephrology : JASN**, Vol. 10, Issue 4, pp. 685-95, (1999) (PubMed).

Zanotti, Berni, Monaco: "Crystal structure of liganded and unliganded forms of bovine plasma retinol-binding protein." in: **The Journal of biological chemistry**, Vol. 268, Issue 15, pp. 10728-38, (1993) (PubMed).

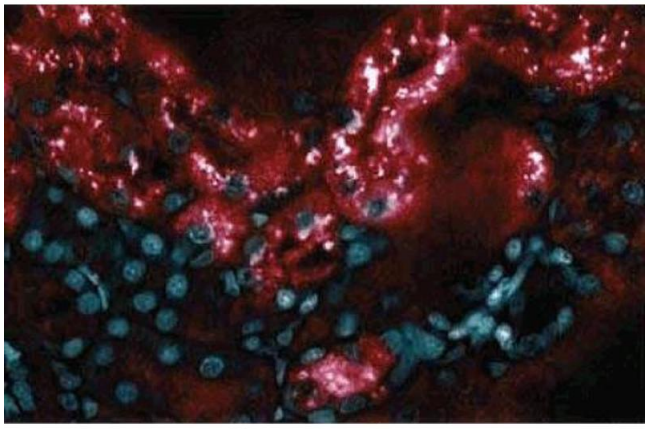
Zanotti, Malpeli, Berni: "The interaction of N-ethyl retinamide with plasma retinol-binding protein (RBP) and the crystal structure of the retinoid-RBP complex at 1.9-A resolution." in: **The Journal of biological chemistry**, Vol. 268, Issue 33, pp. 24873-9, (1993) (PubMed).

Zanotti, Ottonello, Berni, Monaco: "Crystal structure of the trigonal form of human plasma retinol-binding protein at 2.5 A resolution." in: **Journal of molecular biology**, Vol. 230, Issue 2, pp. 613-24, (1993) (PubMed).

Blomhoff, Green, Berg, Norum: "Transport and storage of vitamin A." in: **Science (New York, N.Y.)**, Vol. 250, Issue 4979, pp. 399-404, (1990) (PubMed).

Western Blotting

Image 1. Western blot analysis of RBP on MDCK lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of RBP.



Immunofluorescence

Image 2. Immunofluorescence staining of Rabbit Kidney

Image 3.

Please check the product details page for more images. Overall 4 images are available for ABIN967847.