

## RBP4 / Retinol Binding Protein 4 Antibody

Mouse Monoclonal Antibody [Clone RBP4/4314]

| Catalog No       | Format  | Size   |
|------------------|---|--------|
| 5950-MSM14-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 5950-MSM14-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 5950-MSM14-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

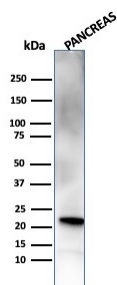
| Applications               | Tested Dillution | Note  |
|----------------------------|------------------|---|
| Immunohistochemistry (IHC) | 1-2ug/ml         | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB)          | 2-4ug/ml         |   |

### Product Details

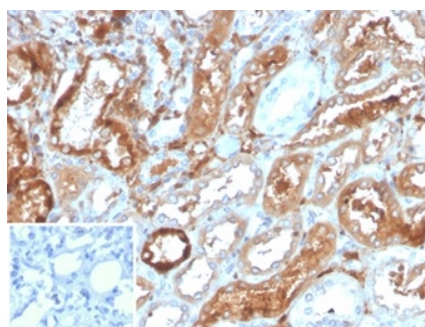
|                               |  |
|-------------------------------|--|
| <b>Clone</b>                  | RBP4/4314  |
| <b>Gene Name</b>              | RBP4   |
| <b>Immunogen</b>              | Recombinant fragment (around aa29-148) of human RBP4 protein (exact sequence is proprietary) |
| <b>Host</b>                   | Mouse  |
| <b>Clonality</b>              | Monoclonal   |
| <b>Isotype / Light Chain</b>  | IgG2b / Kappa  |
| <b>Mol. Weight of Antigen</b> | 25kDa  |
| <b>Cellular Localization</b>  | Secreted   |
| <b>Species Reactivity</b>     | Cat, Dog, Human  |
| <b>Positive Control</b>       | HeP-G2 cells. Human kidney, pancreas or liver tissues.                                       |

\*Optimal dilution for a specific application should be determined.

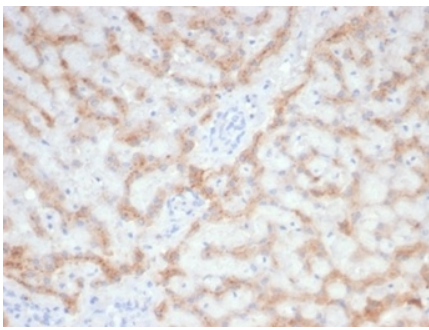
### Product Images for RBP4 / Retinol Binding Protein 4 Antibody



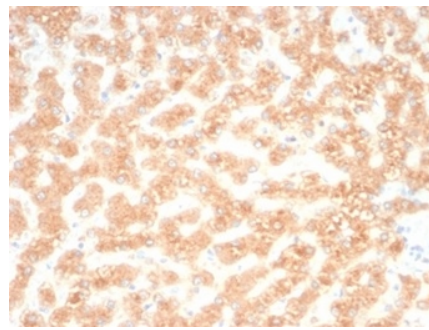
Western blot analysis of human pancreas tissue lysate using RBP4 Mouse Monoclonal Antibody (RBP4/4314).



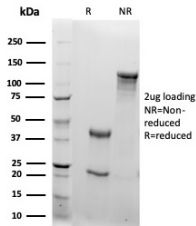
Formalin-fixed, paraffin-embedded human kidney stained with RBP4 Mouse Monoclonal Antibody (RBP4/4314) at 2ug/ml. Inset: PBS instead of primary antibody; secondary only negative control.



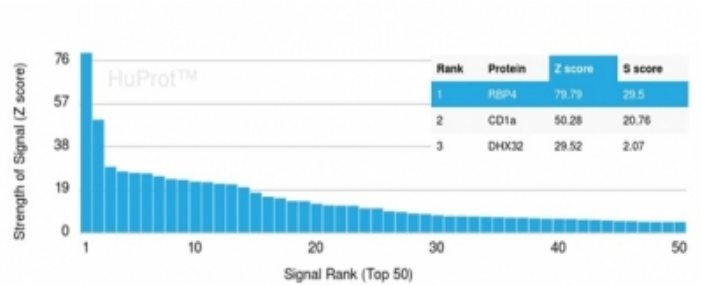
Formalin-fixed, paraffin-embedded dog kidney stained with RBP4 Mouse Monoclonal Antibody (RBP4/4314) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.



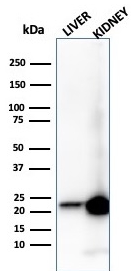
Formalin-fixed, paraffin-embedded cat kidney stained with RBP4 Mouse Monoclonal Antibody (RBP4/4314) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis Purified RBP4 Mouse Monoclonal Antibody (RBP4/4314). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using Monospecific RBP4 Mouse Monoclonal Antibody (RBP4/4314). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Western blot analysis of human kidney and liver tissue lysates using RBP4 Mouse Monoclonal Antibody (RBP4/4314).

### **Specificity & Comments**

Retinol (Vitamin A) is transported in the blood bound to its carrier protein, retinol-binding protein (RBP), also designated plasma retinol-binding protein (PRBP) or RBP4. A member of the lipocalin family, RBP conveys retinol from stores in the liver to peripheral tissues. In plasma, RBP binds transthyretin (TTR, formerly called prealbumin) to prevent glomerular filtration of low molecular weight RBP in the kidneys. The stability of this complex holds diagnostic importance because the molar ratio of RBP:TTR provides an indirect way to indicate marginal Vitamin A deficiency. Vitamin A deficiency blocks the secretion of RBP, resulting in defective delivery and supply to epidermal cells. Originally identified solely as a transporter protein, recent studies correlating increased levels of RBP expression in adipose tissue with Insulin resistance have generated research into the possible roles the protein may play in the pathogenesis of type 2 diabetes and obesity.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide store at 2 to 8 °C. Antibody without azide store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

Cardiovascular, Infectious Disease

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