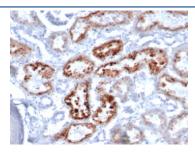


# Retinol Binding Protein 4 Antibody / RBP4 [clone RBP4/4046] (V4111)

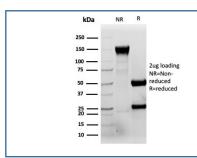
Catalog No.	Formulation	Size
V4111-100UG	0.2~mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4111-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4111SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

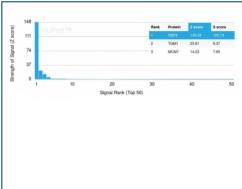
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	RBP4/4046
Purity	Protein A/G affinity
UniProt	P02753
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This Retinol Binding Protein 4 antibody is available for research use only.



IHC staining of FFPE human kidney tissue with RBP4 antibody (clone RBP4/4046). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free RBP4 antibody (clone RBP4/4046) as confirmation of integrity and purity.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using RBP4 antibody (clone RBP4/4046). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) 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(TM) 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 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.

### **Description**

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.

#### Application Notes

Optimal dilution of the Retinol Binding Protein 4 antibody should be determined by the researcher.

## **Immunogen**

A recombinant partial protein (within amino acids 29-148) from the human protein was used as the immunogen for the Retinol Binding Protein 4 antibody.

#### **Storage**

Aliquot the Retinol Binding Protein 4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.