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## Product Information Sheet

### **Ordering Information**

Product Number: V100020

Product Name: Anti-Retinol-binding protein 4 (RBP4) antibody \*Mouse anti-human, monoclonal IgG1\*

Unit Size: 50 ug

Storage Conditions: Freeze (<-15 °C)

Expiration Date: 12 months upon receiving

### **Chemical and Spectral Properties**

Appearance: Solid

Molecular Weight: N/A

Soluble In: Water

Excitation Wavelength: N/A

Emission Wavelength: N/A

### **Application Notes**

Retinol binding protein 4 (RBP4) is a protein belonging to the lipocalin family. It functions primarily as a carrier for retinol (vitamin A) delivering it from liver stores to peripheral tissues. In aqueous solutions, retinol is insoluble and quite unstable. When in plasma, retinols solubility and stability improve due to its tight interaction with RBP4. It is also here that RBP4-retinol complexes interact with transthyretin (TTR), a thyroxine-binding protein. This interaction yields retinol-RBP4-TTR complexes which prevents the loss of RBP4 by filtration through the kidney glomeruli. In recent years, mutations in the RBP4 gene have been linked to a form of autosomal dominant microphthalmia, anophthalmia, and coloboma (MAC) disease, making it a promising therapeutic target for the treatment of MAC. Anti-RBP4 monoclonal antibodies are highly sensitive for the detection of human RBP4 immunogens. They are well-suited for use in immunoassays such as in latex enhanced turbidity immunoassays (LETIA).