

### **Polyclonal Antibody against Mouse Retinol Protein 4**

Catalog Number: 12060 Size: 100 µg Host: Rabbit

#### **Introduction to the Molecule**

Retinol binding protein 4 (RBP4), originally known as a specific transport of retinol in blood, is also a novel inflammatory and insulin resistance marker. Serum RBP4 levels are elevated in insulin resistant mice and humans with obesity and type 2 diabetes. Animal experiments found that increased secretion of RBP4 might reduce insulin-dependent glucose uptake by muscle tissue by reducing the activity of phosphoinositide 3-kinase (PI(3)K), and increased hepatic glucose output by increasing the expression of the enzyme PEPCK2. Studies suggested that elevated serum RBP4 was associated with components of the metabolic syndrome, including increased body-mass index, waist-to-hip ratio, serum triglyceride levels and systolic blood pressure, and decreased high-density lipoprotein cholesterol levels. Furthermore, circulating RBP4 concentrations were associated with subclinical cardiovascular disease, which imply that RBP4 could be involved in the development of atherosclerosis.

## **Purification**

Antigen affinity-purified

#### Immunogen

Recombinant full-length mouse RBP4 expressed in *E.coli*.

### **Specificity**

The antibody detects mouse RBP4 in western blot and ELISA.

### **Formulation & Storage**

Liquid in phosphate-buffered saline (PBS). Store at -20°C for less than one week. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/defrost cycles.

# **Application/Usage**

**Western blot** - This antibody can be used as primary antibody in western blot assay to detect mouse RBP4. **ELISA** - This antibody can be used in ELISA with the appropriate secondary reagents to detect mouse RBP4.

### **Quality Control Test**

BCA to determine quantity of the antibody.