# Monoclonal Antibody against Human Retinol Binding Protein 4 (5H9)

Catalog Number: 21060 Size: 100 µg Host: Mouse

# **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**

Protein G affinity purification

#### Immunogen

Recombinant human RBP4 (Cat. No. 41060) in E.coli.

## **Specificity**

The antibody detects human RBP4.

## **Formulation & Storage**

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

# **Application/Usage**

This antibody can be used as a capture antibody in a human retinol binding protein 4 ELISA in combination with monoclonal anti-human retinol binding protein 4 antibody (Cat. No.: 21061) as detection antibody.