Polyclonal Antibody against Human Fatty-acid Binding Protein 5

Catalog Number: 11040 Size: 100 µg Host: Rabbit

Introduction to the Molecule

The fatty-acid-binding proteins (FABPs) are a family of carrier proteins for fatty acids and other lipophilic substances such as eicosanoids and retinoids. These proteins are thought to facilitate the transfer of fatty acids between extra- and intracellular membranes. The fatty acid binding protein 4 (FABP4) and fatty acid binding protein 5 (FABP5) are closely related and both are expressed in adipocytes. Mice with targeted disruption of FABP4 accompany FABP5 almost completely to protect against diet-induced obesity, insulin resistance, dyslipidemia, type 2 diabetes, and fatty liver disease, while mice overexpressing FABP5 in adipose tissues have reduced insulin sensitivity.

Purification

Rabbit crude IgG was purified by protein-G column.

Immunogen

Recombinant full-length human FABP5 expressed in E.coli.

Specificity

The antibody detects human FABP5.

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 at $0.5-2 \,\mu g/mL$ with the appropriate secondary reagents to detect human FABP5.

Immunoprecipitation, **ELISA** and **immunocytochemistry** are not tested.

Quality Control Test

BCA to determine quantity of the antibody.

References

[1] Xu A, et al. (2006) Adipocyte Fatty Acid-Binding Protein Is a Plasma Biomarker Closely Associated with Obesity and Metabolic Syndrome. Clin Chem. 52(3):405-13.

[2] Xu A, et al. (2007) Circulating adipocyte–fatty acid binding protein levels predict the development of the metabolic syndrome: a 5-year prospective study. Circulation. 115:1537–1543.

[3] Rhee EJ, et al. (2009) The association of serum adipocyte fatty acid-binding protein with coronary artery disease in Korean adults. Eur J Endocrinol. 160(2):165-72.