Polyclonal Antibody against Human Fatty-acid Binding Protein 4

Catalog Number: 11030 Size: 100 µg Host: Rabbit

Introduction to the Molecule

Fatty-acid binding protein 4 (FABP4), also termed adipocyte fatty-acid binding protein (A-FABP), or aP2, is a novel adipocyte-expressed factor which accounted for $\sim\!6\%$ of total cellular proteins. Several animal experiments suggested that FABP4 plays a key role in the link between obesity and various features of metabolic syndrome. 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. Studies in human found FABP4 serum levels were significantly increased in overweight and obese subjects, which predicted the risk to develop metabolic syndrome and type 2 diabetes. Additionally, serum FABP4 levels were associated with carotid atherosclerosis and coronary artery disease.

Purification

Rabbit crude IgG was purified by protein-G column.

Immunogen

Recombinant full-length human FABP4 expressed in E.coli.

Specificity

The antibody detects human FABP4.

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 0.1- $0.2 \mu g/mL$ with the appropriate secondary reagents to detect human FABP4.

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.