

Polyclonal Antibody against Human Angiopoietin-like Protein 4

Catalog Number: 11020 Size: 100 µg Host: Rabbit

Introduction to the Molecule

Angiopoietin-like protein 4 (ANGPTL4), also known as PPARy angiopoietin-related protein, fasting-induced adipose factor, or hepatic fibrinogen/ angiopoietin-related protein (HFARP), is an adipokine predominantly expressed in adipose tissue and liver. The experimental results show that ANGPTL4 is a blood-borne hormone directly involved in regulating glucose homeostasis, lipid metabolism, and insulin sensitivity. Serum levels of ANGPTL4 were decreased in patients with type 2 diabetes. In animal experiments, ANGPTL4 treatments might reduce hyperglycemia, and improve glucose tolerance by decreasing hepatic glucose production and enhancing insulin-mediated inhibition of gluconeogenesis. However, the molecular mechanisms underlying its metabolic actions remain elusive.

Purification

Rabbit crude IgG was purified by protein-G chromatography.

Immunogen

Recombinant full-length human ANGPTL4 expressed in E.coli.

Specificity

The antibody detects human ANGPTL4.

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 ANGPTL4.

ELISA - This antibody can be used at $0.5-1.0~\mu g/mL$ with the appropriate secondary reagents to detect human ANGPTL4.

Quality Control Test

BCA to determine quantity of the antibody.

References

[1] Xu A, et al. (2005) Testosterone selectively reduces the high molecular weight form of adiponectin by inhibiting its secretion from adipocytes. *J. Biol. Chem.* 280, 18073–18080

[2] Wang Y, et al. (2007) Overexpression of angiopoietin-like protein 4 alters mitochondria activities and modulates methionine metabolic cycle in the liver tissues of db/db diabetic mice. *Mol Endocrinol*. 21(4):972-86.