Polyclonal Antibody against Human Adiponectin

Catalog Number: 11010 Size: 100 µg Host: Rabbit

Introduction to the Molecule

Adiponectin, also termed gelatin-binding protein-28 (GBP28), AdipoQ, ACP30 (Acrp30), or apM, is a major adipocyte-secreted adipokine which is abundantly present in the circulation as three distinct oligomeric complexes: LMW(67kDa), MMW(167kDa) and HMW(300kDa) adiponectin. Its levels are decreased in insulin resistance, diabetes and cardiovascular disease. Conversely, elevation of circulating adiponectin concentrations can alleviate various vascular dysfunctions in animal models, suggesting this adipokine exerts vasculo-protective effects. In addition, adiponectin may also be of importance in the development and progression of several malignancies.

Purification

Rabbit crude IgG was purified by protein-G chromatography.

Immunogen

Recombinant full-length human adiponectin expressed in mammalian cells.

Specificity

The antibody detects three types of circular human adiponectin and monomer (30kDa) adiponectin.

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 adiponectin.

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

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] Xu A, et al. (2008) Selective Elevation of Adiponectin Production by the Natural Compounds Derived from a Medicinal Herb Alleviates Insulin Resistance and Glucose Intolerance in Obese Mice. *Endocrinology*. [Epub ahead of print]

[3] Xu A, et al. (2004) Adiponectin ameliorates dyslipidemia induced by the human immunodeficiency virus protease inhibitor ritonavir in mice. *Endocrinology*. 145(2):487-94

[4] Wang Y, et al. (2008) Post-translational modifications of adiponectin: mechanisms and functional implications. *Biochem J.* 409(3):623-33