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Adiponectin Antibody
Catalog # ASC10330

Specification

Adiponectin Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q15848
Other Accession	NP_004788, 9370
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 27 kDa** **Observed: 26 kDa KDa**
Application Notes	**Adiponectin antibody can be used for the detection of adiponectin by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

Adiponectin Antibody - Additional Information

Gene ID **9370**

Other Names
Adiponectin Antibody: ACDC, ADPN, APM1, APM-1, GBP28, ACRP30, ADIPQTL1, ACDC, Adiponectin, 30 kDa adipocyte complement-related protein, adiponectin, C1Q and collagen domain containing

Target/Specificity
Adiponectin antibody was raised against a 15 amino acid synthetic peptide from near the carboxy terminus of human adiponectin.

The immunogen is located within the last 50 amino acids of Adiponectin.

Reconstitution & Storage
Adiponectin antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
Adiponectin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Adiponectin Antibody - Protein Information

Name ADIPOQ

Function

Important adipokine involved in the control of fat metabolism and insulin sensitivity, with direct anti-diabetic, anti-atherogenic and anti-inflammatory activities. Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion. Antagonizes TNF-alpha by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. Inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway. May play a role in cell growth, angiogenesis and tissue remodeling by binding and sequestering various growth factors with distinct binding affinities, depending on the type of complex, LMW, MMW or HMW.

Cellular Location
Secreted.

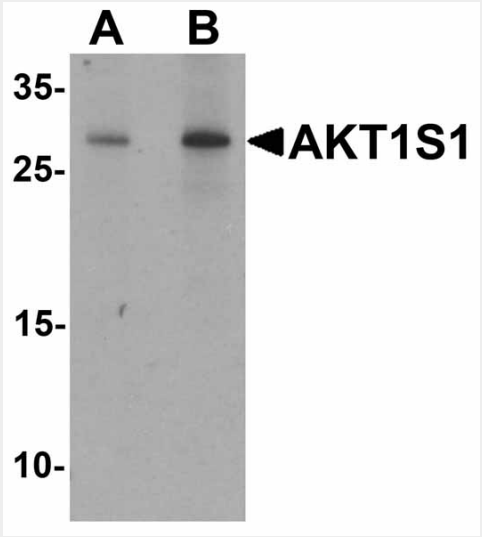
Tissue Location
Synthesized exclusively by adipocytes and secreted into plasma.

Adiponectin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Adiponectin Antibody - Images



Western blot analysis of AKT1S1 in human brain tissue lysate with AKT1S1 antibody at (A) 1 and (B) 2 µg/mL.

Adiponectin Antibody - Background

Adiponectin Antibody: Adipose tissue of an organism plays a major role in regulating physiologic and pathologic processes such as metabolism and immunity by producing and secreting a variety of

bioactive molecules termed adipokines. One highly conserved family of adipokines is adiponectin/ACRP30 and its structural and functional paralogs, the C1q/tumor necrosis factor-alpha-related proteins (CTRPs) 1-7. Unlike the CTRPs, which are expressed in a wide variety of tissues, adiponectin is reported to be expressed exclusively by differentiated adipocytes. These proteins are thought to act mainly on liver and muscle tissue to control glucose and lipid metabolism. An analysis of the crystal structure of adiponectin revealed a structural and evolutionary link between TNF and C1q-containing proteins, suggesting that these proteins arose from a common ancestral innate immunity gene. It is present in high levels in normal human plasma, but is reduced in obese subjects and often in those with increased insulin resistance and type 2 diabetes, suggesting that adiponectin may be a useful pharmacological target in various metabolic diseases.

Adiponectin Antibody - References

Fantuzzi G. Adipose tissue, adipokines, and inflammation. J. Allergy Clin. Immunol. 2005; 115:911-9.
Tsao T-S, Lodish HF, and Fruebis J. ACRP30, a new hormone controlling fat and glucose metabolism. Euro. J. Pharmacol. 2002; 440:213-21.
Wong GW, Wang J, Hug C, et al. A family of Acrp30/ adiponectin structural and functional paralogs. Proc. Natl. Acad. Sci. USA 2004; 101:10302-7.
Shapiro L and Scherer PE. The crystal structure of a complement-1q family protein suggests an evolutionary link to tumor necrosis factor. Curr. Biol. 1998; 8:335-8.