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Adiponectin Antibody

Catalog # ASC10331

Product Information

Application	WB, E, IHC-P
Primary Accession	Q15848
Other Accession	NP_004788, 4757760
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26414
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Adiponectin antibody can be used for the detection of adiponectin by Western blot at 1 to 4 □g/mL. Antibody can also be used for immunohistochemistry starting at 1 □g/mL.

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	ADIPOQ;
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.

Protein Information

Name	ADIPOQ
Function	Important adipokine involved in the control of fat metabolism and insulin sensitivity upon binding to its receptors ADIPOR1 or ADIPOR2, with direct anti-diabetic effect. Also has anti-atherogenic and anti-inflammatory activities (By similarity). Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion (By similarity). Antagonizes TNF 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 (PubMed:10982546). 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 (By similarity).
Cellular Location	Secreted.
Tissue Location	Synthesized exclusively by adipocytes and secreted into plasma.

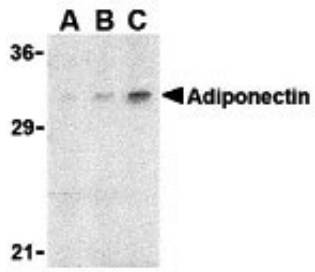
Background

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.

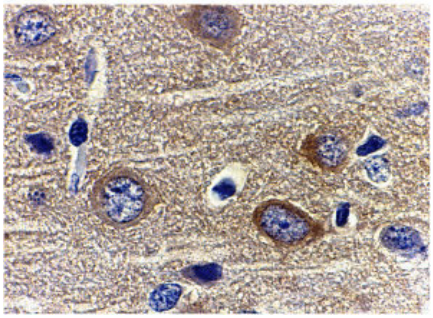
References

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.

Images



Western blot analysis of adiponectin in rat brain cell lysate with adiponectin antibody at (A) 1, (B) 2, and (C) 4 µg/mL.



Immunohistochemistry of adiponectin in rat brain tissue with adiponectin antibody at 1 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.