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Anti-Adiponectin (Marker of Obesity) Antibody

Mouse Monoclonal Antibody
Catalog # AH13614

Product Information

Application	IHC-P, IF, FC, E
Primary Accession	Q15848
Other Accession	80485
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b
Clone Names	ADPN/1370
Calculated MW	26414

Additional Information

Gene ID	9370
Other Names	Adiponectin; Adipocyte complement-related 30kDa protein (ACRP30); Adipocyte-specific secretory protein; Adiponectin, C1Q and collagen domain containing (ACDC); ADIPOQ; Adipose most abundant gene transcript 1 protein; Adipose specific collagen like factor; ADIPQTL1; ADPN; APM-1; Gelatin-binding protein 28 (GBP28)
Application Note	ELISA (For coating, use antibody without BSA),Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) ,(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Adiponectin (Marker of Obesity) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

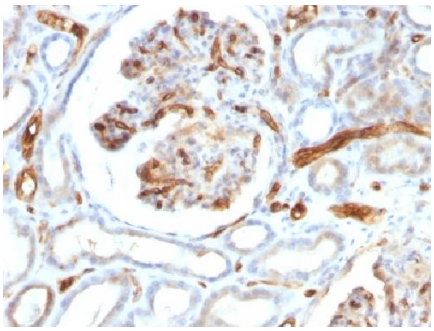
Name	ADIPOQ
Function	Important adipokine involved in the control of fat metabolism and insulin

	sensitivity, 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.

Background

This MAb reacts with adiponectin, an adipocytokine. Adipocytokines are hormones produced in adipose tissue. Adiponectin is abundantly present in plasma and has insulin like effect on glucose levels in the blood. Plasma adiponectin levels are low in insulin resistant patients who are obese, have diabetes mellitus type 2 or HIV-lipodystrophy. In women adiponectin levels tend to be higher than in men, which may be due to androgens suppressing adiponectin levels. Furthermore adiponectin and leptin are both indicated in regulating body weight through direct action on the hypothalamus, influencing appetite. Obese people have low adiponectin levels while levels in anorexia patients are high. Adiponectin acts as ligand for various receptors, two of which have been identified, one probably involved in carbohydrate assimilation, the other in tuning the rate of metabolism.

Images



Formalin-fixed, paraffin-embedded human Kidney stained with Adiponectin Monoclonal Antibody (ADPN/1370).