

Product datasheet

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ARG10840 anti-Adiponectin antibody [Adn27]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [Adn27] recognizes Adiponectin

Tested Reactivity Hu

Tested Application ELISA, FLISA, sELISA

Host Mouse

Clonality Monoclonal

Clone Adn27

Target Name Adiponectin

Species Human

Immunogen Native Human adiponectin.

Conjugation Un-conjugated

Alternate Names Adipose most abundant gene transcript 1 protein; ADPN; APM-1; Gelatin-binding protein; APM1; ACDC;

Adiponectin; apM-1; ACRP30; ADIPQTL1; GBP28; 30 kDa adipocyte complement-related protein; Adipocyte, C1q and collagen domain-containing protein; Adipocyte complement-related 30 kDa protein

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	FLISA	Assay-dependent
	sELISA	Assay-dependent
	sELISA: ARG10839 and ARG10840 can serve as capture and detection antibodies (Please refer to ARG30298: Adiponectin (LMW) ELISA Duo) * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Purification with Protein A.

Buffer PBS (pH 7.4) and 0.1% Sodium azide

Preservative 0.1% Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

ADIPOQ

Gene Full Name

adiponectin, C1Q and collagen domain containing

Background

This gene is expressed in adipose tissue exclusively. It encodes a protein with similarity to collagens X and VIII and complement factor C1q. The encoded protein circulates in the plasma and is involved with metabolic and hormonal processes. Mutations in this gene are associated with adiponectin deficiency. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Apr 2010]

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. [UniProt]

Calculated Mw

26 kDa

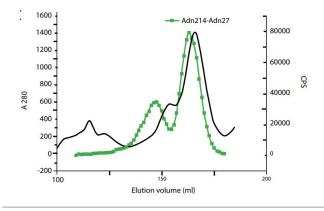
PTM

Hydroxylated Lys-33 was not identified in PubMed:16497731, probably due to poor representation of the N-terminal peptide in mass fingerprinting.

HMW complexes are more extensively glycosylated than smaller oligomers. Hydroxylation and glycosylation of the lysine residues within the collagene-like domain of adiponectin seem to be critically involved in regulating the formation and/or secretion of HMW complexes and consequently contribute to the insulin-sensitizing activity of adiponectin in hepatocytes (By similarity).

O-glycosylated. Not N-glycosylated. O-linked glycans on hydroxylysines consist of Glc-Gal disaccharides bound to the oxygen atom of post-translationally added hydroxyl groups. Sialylated to varying degrees depending on tissue. Thr-22 appears to be the major site of sialylation. Higher sialylation found in SGBS adipocytes than in HEK fibroblasts. Sialylation is not required neither for heterodimerization nor for secretion. Not sialylated on the glycosylated hydroxylysines. Desialylated forms are rapidly cleared from the circulation.

Images



ARG10840 anti-Adiponectin antibody [Adn27] sELISA image

Sandwich ELISA in protein fractions after size-exclusion chromatography, measured by capture-detection antibody combinations - <u>ARG10839</u> anti-Adiponectin (LMW) antibody [Adn214] - <u>ARG10840</u> anti-Adiponectin antibody [Adn27]. 1 ml of normal human serum was applied onto the column. Positions of oligomeric forms of adiponectin and molecular weight markers are depicted in the picture. The black line presents the optical density detected at 280 nm.