

Rabbit ADIPOQ Polyclonal Antibody | anti-ADIPOQ antibody

ADIPOQ Antibody

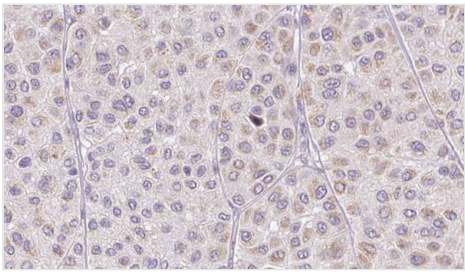
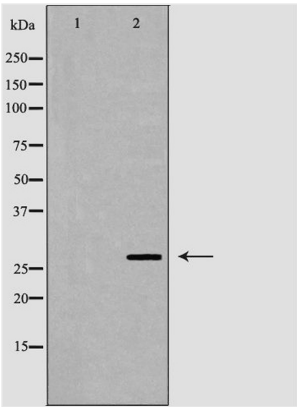
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326749	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ADIPOQ; Polyclonal Antibody; ADIPOQ Antibody; 30 kDa adipocyte complement related protein; 30 kDa adipocyte complement-related protein; ACDC; ACRP30; ADIPO_HUMAN; Adipocyte; Adipocyte C1q and collagen domain containing protein; Adipocyte complement related 30 kDa protein; Adipocyte complement related protein of 30 kDa; Adipocyte complement-related 30 kDa protein; adipocyte-specific secretory protein; Adiponectin; Adiponectin precursor; adiponectin; C1Q and collagen domain containing; Adipoq; Adipose most abundant gene transcript 1; Adipose most abundant gene transcript 1 protein; Adipose specific collagen like factor; ADIPQTL1; ADPN; APM 1; apM-1; APM1; C1q and collagen domain-containing protein; GBP28; Gelatin binding protein; Gelatin binding protein 28; Gelatin-binding protein; anti-ADIPOQ antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ADIPOQ antibody detects endogenous levels of total ADIPOQ
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	244
Applicable Applications for anti-ADIPOQ antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ADIPOQ
Subcellular Location	Secreted.
Tissue Specificity	Synthesized exclusively by adipocytes and secreted into plasma.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (83%), Bovine (89%), Horse (94%), Sheep (83%), Rabbit (89%), Dog (94%), Chicken (83%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326749 at 1/100 staining Human melanoma tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of extracts of NCI-H460, using ADIPOQ antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-ADIPOQ antibody

Description: Adiponectin, also termed AdipoQ, Acrp30, apM1 and GBP28, is an adipokine expressed exclusively in brown and white adipocytes (1). It is secreted into the blood and exists in three major forms: a low molecular weight trimer, a medium molecular weight hexamer and a high molecular weight multimer (1). Adiponectin levels are decreased in obese and insulin-resistant mice and humans (2), suggesting that this adipokine is critical to maintain insulin sensitivity. Adiponectin stimulates the phosphorylation of AMPKalpha at Thr172 and activates AMPK in skeletal muscle (3). It also stimulates glucose uptake in myocytes (3). The block of AMPK activation by a dominant-negative AMPKalpha2 isoform inhibits the effect of adiponectin on glucose uptake, indicating that adiponectin stimulates glucose uptake and increases insulin sensitivity through its action on AMPK (3). Adiponectin mutants that are not able to form oligomers larger than trimers have no effect on the AMPK pathway (4). Mutations that render adiponectin unable to form high molecular weight multimers are associated with human diabetes (4), indicating the importance of multimerization for adiponectin activity.

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.

Subunit Structure: Homomultimer. Forms trimers, hexamers and 12-to 18-mers. The trimers (low molecular weight complexes/LMW) are assembled via non-covalent interactions of the collagen-like domains in a triple helix and hydrophobic interactions within the globular C1q domain. Several trimers can associate to form disulfide-linked hexamers (middle molecular weight complexes/MMW) and larger complexes (higher molecular weight/HMW). The HMW-complex assembly may rely additionally on lysine hydroxylation and glycosylation. LMW, MMW and HMW complexes bind to HBEGF, MMW and HMW complexes bind to PDGFB, and HMW complex binds to FGF2. Interacts with CTRP9A via the C1q domain (heterotrimeric complex) (By similarity).

Post-translational Modifications: 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 collagen-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.

Similarity: The C1q domain is commonly called the globular domain.

NCBI AND UNIPROT INFORMATION

NCBI GI # 295317372

NCBI GeneID	9370
NCBI Accession #	NP_001171271.1
NCBI GenBank Nucleotide #	NM_001177800.1
UniProt Accession #	Q15848; Q58EX9
Molecular Weight	Observed: 28 kDa Predicted: 27 kDa
NCBI Official Full Name	adiponectin
NCBI Official Synonym Full Names	adiponectin, C1Q and collagen domain containing
NCBI Official Symbol	ADIPOQ
NCBI Official Synonym Symbols	ACDC; ADPN; APM1; APM-1; GBP28; ACRP30; ADIPQTL1
NCBI Protein Information	adiponectin
UniProt Protein Name	Adiponectin
UniProt Gene Name	ADIPOQ
UniProt Synonym Gene Names	ACDC; ACRP30; APM1; GBP28; ACRP30; apM-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/adipoq-antibody-immunohistochemistry-western-blot-elisa/326749>