

### Anti-Adiponectin antibody ab216502

6 Images

#### Overview

<b>Product name</b>	Anti-Adiponectin antibody
<b>Description</b>	Rabbit polyclonal to Adiponectin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Adiponectin aa 140-190 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: <a href="#">Q15848</a>
<b>Positive control</b>	IHC-P: Human colon carcinoma and mouse liver tissues. WB: Rat liver, mouse intestine, heart and spleen lysates. HepG2 cell lysate.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab216502 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/500.
WB		1/100 - 1/1000. Predicted molecular weight: 26 kDa.

## Target

### 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.

### Tissue specificity

Synthesized exclusively by adipocytes and secreted into plasma.

### Involvement in disease

Defects in ADIPOQ are the cause of adiponectin deficiency (ADPND) [MIM:612556]. ADPND results in very low concentrations of plasma adiponectin.

Genetic variations in ADIPOQ are associated with non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853]; also known as diabetes mellitus type 2. NIDDM is characterized by an autosomal dominant mode of inheritance, onset during adulthood and insulin resistance.

### Sequence similarities

Contains 1 C1q domain.

Contains 1 collagen-like domain.

### Domain

The C1q domain is commonly called the globular domain.

### 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.

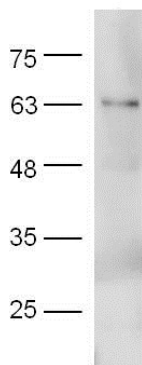
O-glycosylated. Not N-glycosylated. O-linked glycans on hydroxylysines consist of Glc-Gal disaccharides bound to the oxygen atom of post-translationally added hydroxyl groups. Sialylated to varying degrees depending on tissue. Thr-22 appears to be the major site of sialylation. Higher sialylation found 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.

### Cellular localization

Secreted.

## Images



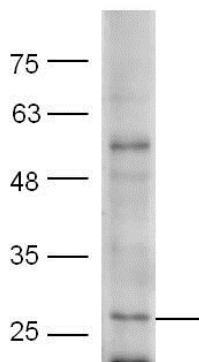
Western blot - Anti-Adiponectin antibody (ab216502)

Anti-Adiponectin antibody (ab216502) at 1/300 dilution + HepG2 cell lysate

### Secondary

Goat Anti-Rabbit IgG Antibody (H+L), HRP Conjugated at 1/5000 dilution

**Predicted band size:** 26 kDa



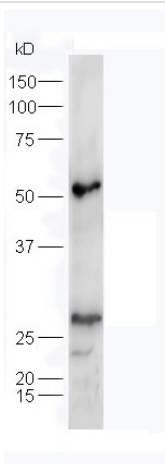
Western blot - Anti-Adiponectin antibody (ab216502)

Anti-Adiponectin antibody (ab216502) at 1/300 dilution + Mouse spleen lysate

### Secondary

Goat Anti-Rabbit IgG Antibody (H+L), HRP Conjugated at 1/5000 dilution

**Predicted band size:** 26 kDa



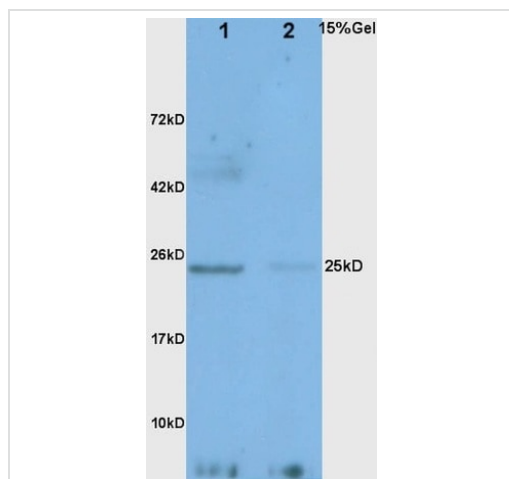
Western blot - Anti-Adiponectin antibody (ab216502)

Anti-Adiponectin antibody (ab216502) at 1/300 dilution + mouse heart lysate

### Secondary

Goat Anti-Rabbit IgG Antibody (H+L), HRP Conjugated at 1/5000 dilution

**Predicted band size:** 26 kDa



Western blot - Anti-Adiponectin antibody (ab216502)

**All lanes** : Anti-Adiponectin antibody (ab216502) at 1/200 dilution

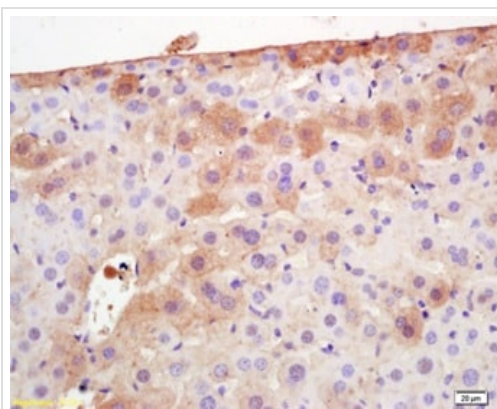
**Lane 1** : rat liver lysate

**Lane 2** : mouse intestine lysate

### Secondary

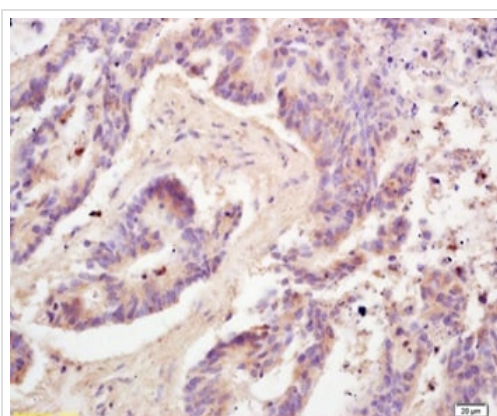
**All lanes** : Goat Anti-Rabbit IgG Antibody (H+L), HRP Conjugated at 1/3000 dilution

**Predicted band size:** 26 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody (ab216502)

Immunohistochemical analysis of formalin-fixed and paraffin embedded mouse liver tissue labeling Adiponectin using ab216502 at 1/200, followed by secondary detection and DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody (ab216502)

Immunohistochemical analysis of formalin-fixed and paraffin embedded human colon carcinoma tissue labeling Adiponectin using ab216502 at 1/200, followed by secondary detection and DAB staining.

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