

## Product datasheet

# Anti-Adiponectin antibody - C-terminal ab181699

2 References 6 Images

### Overview

<b>Product name</b>	Anti-Adiponectin antibody - C-terminal
<b>Description</b>	Rabbit polyclonal to Adiponectin - C-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IHC-Fr
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Cow 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Adiponectin aa 224-244 (C terminal). Sequence: LYADNDNDSTFTGFLLYHDTN  Database link: <a href="#">Q15848</a>   <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>

### General notes

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

## 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>	Preservatives: 0.025% Thimerosal (merthiolate), 0.025% Sodium azide Constituents: 2.5% BSA, 0.45% Sodium chloride, 0.1% Dibasic monohydrogen sodium phosphate
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab181699** 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
WB		Use a concentration of 0.1 - 0.5 µg/ml. Predicted molecular weight: 26 kDa. The detection limit for Adiponectin is approximately 1ng/lane under reducing conditions.
IHC-P		Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IHC-Fr		Use a concentration of 0.5 - 1 µg/ml.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Synthesized exclusively by adipocytes and secreted into plasma.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Contains 1 C1q domain. Contains 1 collagen-like domain.
<b>Domain</b>	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.

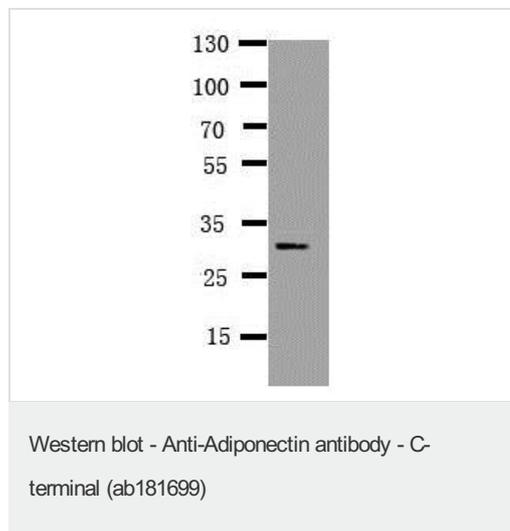
HMW complexes are more extensively glycosylated than smaller oligomers. Hydroxylation and glycosylation of the lysine residues within the collagene-like domain of adiponectin seem to be critically involved in regulating the formation and/or secretion of HMW complexes and consequently contribute to the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

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

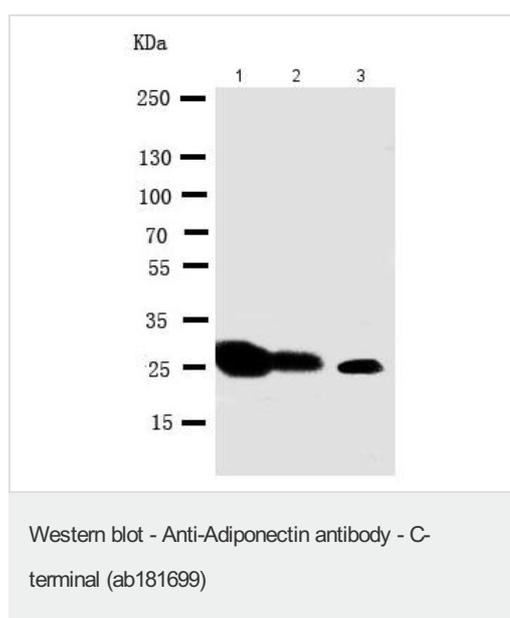
Secreted.

## Images



Anti-Adiponectin antibody - C-terminal (ab181699) at 0.5  $\mu\text{g/ml}$  + rat heart tissue lysate

**Predicted band size:** 26 kDa



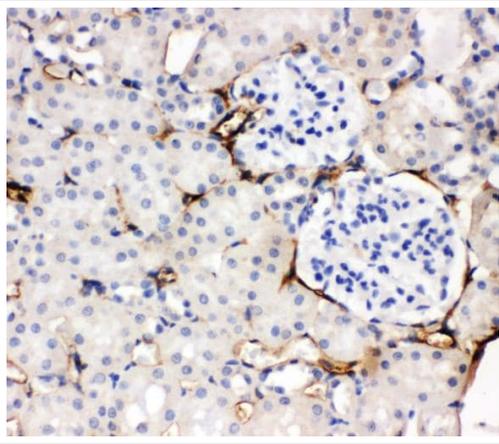
**All lanes :** Anti-Adiponectin antibody - C-terminal (ab181699) at 0.5  $\mu\text{g/ml}$

**Lane 1 :** Recombinant Human Adiponectin protein at 0.01  $\mu\text{g}$

**Lane 2 :** Recombinant Human Adiponectin protein at 0.05  $\mu\text{g}$

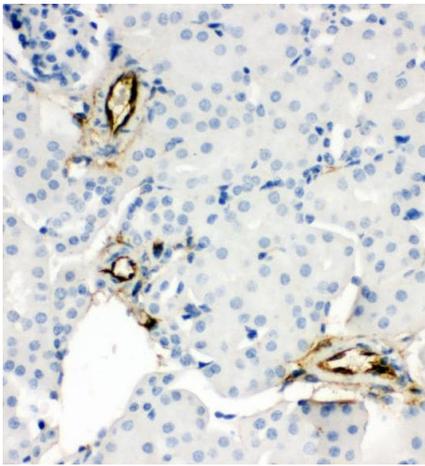
**Lane 3 :** Recombinant Human Adiponectin protein at 0.0025  $\mu\text{g}$

**Predicted band size:** 26 kDa



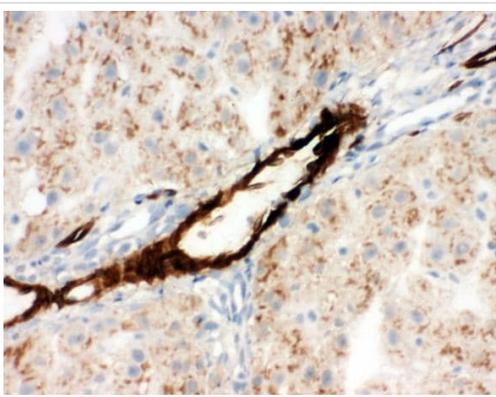
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody - C-terminal (ab181699)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue, labeling Adiponectin using ab181699 at 1  $\mu\text{g/ml}$ .



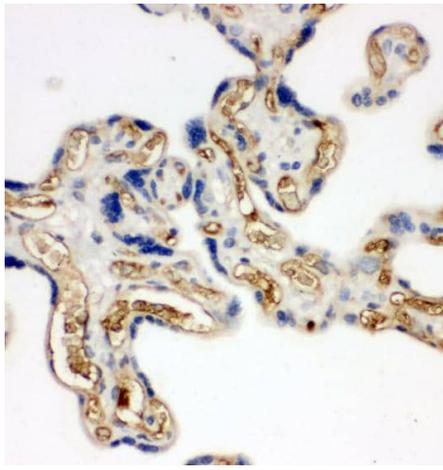
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody - C-terminal (ab181699)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue, labeling Adiponectin using ab181699 at 1  $\mu\text{g/ml}$ .



Immunohistochemistry (Frozen sections) - Anti-Adiponectin antibody - C-terminal (ab181699)

Immunohistochemical analysis of frozen rat liver tissue, labeling Adiponectin using ab181699 at 1  $\mu\text{g/ml}$ .



Immunohistochemical analysis of paraffin-embedded Human placenta tissue, labeling Adiponectin using ab181699 at 1 µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody - C-terminal (ab181699)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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