Product datasheet

Anti-Adiponectin antibody ab62551

Overview

Product name
Anti-Adiponectin antibody

Description
Rabbit polyclonal to Adiponectin

Host species
Rabbit

Tested applications
Suitable for: WB, IHC-P

Species reactivity
Reacts with: Rat

Immunogen
A 15 amino acid peptide from near the amino terminus of human Adiponectin.

Positive control
Rat brain cell lysate. Rat brain tissue.

General notes
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.

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&As

Properties

Form
Liquid

Storage instructions
Shipped at 4°C. Store at +4°C.

Storage buffer
pH: 7.2
Preservative: 0.02% Sodium azide
Constituent: PBS

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

The Abpromise guarantee
Our Abpromise guarantee covers the use of ab62551 in the following tested applications.

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

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**Target**

**Function**

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**Images**
**Western blot - Anti-Adiponectin antibody (ab62551)**

**Lane 1**: Anti-Adiponectin antibody (ab62551) at 1 µg/ml

**Lane 2**: Anti-Adiponectin antibody (ab62551) at 2 µg/ml

**Lane 3**: Anti-Adiponectin antibody (ab62551) at 4 µg/ml

**All lanes**: Rat brain cell lysate

Lysates/proteins at 15 µg per lane.

**Predicted band size**: 26 kDa

**Observed band size**: 32 kDa

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adiponectin antibody (ab62551)**

ab62551, at 1µg/ml, staining Adiponectin in rat brain tissue by immunohistochemistry using paraffin-embedded tissue.

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

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