

## Product datasheet

# Recombinant human Adiponectin protein ab54482

### 概述

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产品名称	重组人Adiponectin蛋白
蛋白长度	Full length protein

### 描述

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性质	Recombinant
来源	Escherichia coli

### 氨基酸序列

Accession [Q15848](#)

种属 Human

序列 MKGEPGEGAY VYRSAFSVGL ETYVTIPNMP  
 IRFTKIFYNQ QNHYDGSTGK FHCNIPGLYY  
 FAYHITVYMK DVKVSLFKKD KAMLFTYDQY  
 QENNVDQASG SVLLHLEVGD QVWLQVYGE  
 ERNGLYADND NDSTFTGFLL YHDTN

分子量 17 kDa

氨基酸 101 to 244

### 技术指标

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Our [Abpromise guarantee](#) covers the use of **ab54482** in the following tested applications.

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

**生物活性** Determined by its ability to inhibit the proliferation of murine M1 cells. The expected ED50 for this effect is 1.0-3.0 µg/ml.

**应用** SDS-PAGE  
 Functional Studies

**纯度** > 95 % SDS-PAGE.  
 Purity: > 98% by SDS-PAGE and HPLC analysis.

**形式** Lyophilised

### 制备和贮存

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## 稳定性和存储

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Preservative: None

Constituents: 25mM DTT, 10mM Sodium phosphate, pH 9

Endotoxin level: < 2 EU per µg of gAcrp30.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

## 复溶

Reconstitute in water to a concentration of 0.1-0.5mg/ml. This solution can be diluted in water or other buffer solutions.

## 常规信息

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### 功能

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.

### 组织特异性

Synthesized exclusively by adipocytes and secreted into plasma.

### 疾病相关

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.

### 序列相似性

Contains 1 C1q domain.

Contains 1 collagen-like domain.

### 结构域

The C1q domain is commonly called the globular domain.

### 翻译后修饰

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.

### 细胞定位

Secreted.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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