

# Recombinant human Adiponectin (gAcrp30/Adipolean Variant) protein ab50219

### 製品の詳細

製品名	Recombinant human Adiponectin (gAcrp30/Adipolean Variant) protein		
生理活性	Biological Activity : Determined by a cytotoxicity assay using M1 cells. The expected ED <sub>50</sub> for this effect is 0.5-1.0 µg/ml.		
精製度	> 98 % SDS-PAGE. Greater than 98% by HPLC analyses. Endotoxin level is less than 0.1 ng per g (1EU/g).		
発現系	Escherichia coli		
タンパク質長	Full length protein		
Animal free	No		
由来	Recombinant		
生物種	Human		
配列	PGAEGPRGFP	GIQGRKGEPG	EGAYVYRSAF
	SVGLETYVTI	PNMPIRFTKI	FYNQQNHYDG
	STGKFHCNIP	GLYYFAYHIT	VYMKDVKVSL
	FKKDKAMLFT	YDQYQENNVD	QASGSVLLHL
	EVG DQVWLQV	YGEGERNGLY	ADNDNDSTFT
			GFLLYHDTN
予測される分子量	18 kDa		
配列の追加情報	This naturally occurring variant of human gAcrp30/Adipolean is an 18.1 kDa protein, containing 14 extra amino acids extra at the N-terminus of human gAcrp30/Adipolean.		
製品の詳細	Recombinant human Adiponectin protein		

### 特性

Our **Abpromise guarantee** covers the use of **ab50219** in the following tested applications.

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

アプリケーション	SDS-PAGE
	Functional Studies
製品の状態	Lyophilized
備考	The gAcrp30 variant is a naturally occurring globular protein obtained by proteolytic processing of adiponectin. Adiponectin is produced and secreted exclusively by adipocytes, and is a relatively abundant plasma protein, accounting for up to 0.05% of total serum protein. Like Adiponectin,

Acip30 is capable of decreasing hyperglycemia and reversing insulin resistance. Additionally, gAcip30 has been shown to be an important factor in promoting fat loss by signaling muscle to absorb and burn Free-Fatty Acids (FFAs). The signaling receptors for adiponectin and gAcip30 have recently been identified and named AdipoR1 and AdipoR2. AdipoR2 is predominantly expressed in the liver.

---

## 前処理および保存

### 保存方法および安定性

Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C long term.

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

### 再構成

Reconstitute to 1mg/ml using sterile water.

---

## 関連情報

### 機能

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.

### 組織特異性

Synthesized exclusively by adipocytes and secreted into plasma.

### 関連疾患

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.

### 配列類似性

Contains 1 C1q domain.

Contains 1 collagen-like domain.

### ドメイン

The C1q domain is commonly called the globular domain.

### 翻訳後修飾

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.

### 細胞内局在

Secreted.

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors