# abcam

# Product datasheet

# Human Adiponectin ELISA Kit ab99968

★★★★★ 2 Abreviews 23 References 画像数 3

#### 製品の概要

製品名 Human Adiponectin ELISA Kit

**検出方法** Colorimetric

サンプルの種類 Cell culture supernatant, Serum, Plasma

アッセイタイプ Sandwich (quantitative)

**検出感度** < 25 pg/ml

**添加回収試験** < 96 %

特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Cell culture supernatant	96.59	83% - 107%
Serum	93.57	83% - 104%
Plasma	90.29	80% - 103%

ステップ Multiple steps standard assay

種交差性 交差種: Human

製品の概要 Abcam's Human Adiponectin ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human Adiponectin in

serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human Adiponectin coated on a 96-well plate. Standards and samples are pipetted into the wells and Adiponectin present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human Adiponectin antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of Adiponectin bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

特記事項 Optimisation may be required with urine samples.

試験プラットフォーム Microplate

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#### 保存方法

Store at -20°C. Please refer to protocols.

内容	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
80x HRP-Streptavidin Concentrate	1 x 200µl
Adiponectin Microplate with anti-human Adiponectin.	1 unit
Assay Diluent A	2 x 30ml
Assay Diluent C	2 x 15ml
Biotinylated Anti-Human Adiponectin	2 vials
Standard Recombinant Human Adiponectin (Lyophilized).	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

#### 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

#### 関連疾患

Synthesized exclusively by adipocytes and secreted into plasma.

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

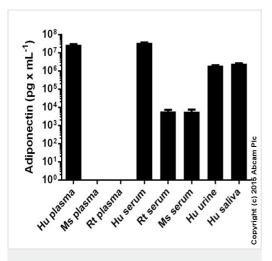
Hydroxylated Lys-33 was not identified in PubMed:16497731, probably due to poor representation of the N-terminal peptide in mass fingerprinting.

HMW complexes are more extensively glycosylated than smaller oligomers. Hydroxylation and glycosylation of the lysine residues within the 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

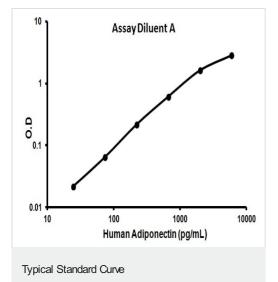
Secreted.

### 画像

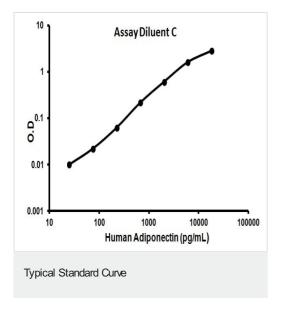


Adiponectin measured in biological fluids showing quantity (pg) per mL of tested sample. Human serum and plasma were diluted 2700-24300 fold. Rat and mouse serum were diluted 1-3 fold. Human urine and saliva were diluted 300-2700 fold.





Representative Standard Curve using ab99968



Representative Standard Curve using ab99968

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