



Recombinant Protein Technical Manual  
Recombinant Human Adiponectin/ADIPOQ Protein  
(His Tag)  
RPES2122

### Product Data:

**Product SKU:** RPES2122

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q15848

### Protein Information:

**Molecular Mass:** 25.6 kDa

**AP Molecular Mass:** 30 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Adiponectin; 30 kDa Adipocyte Complement-Related Protein; Adipocyte complement-related 30 kDa protein; ACRP30; Adipocyte; C1q and Collagen Domain-Containing Protein; Adipose Most Abundant Gene Transcript 1 Protein; apM; Gelatin-Binding Protein; ADIPOQ; ACDC; ACRP30; APM1; GBP28

## Immunogen Information:

**Sequence:** Glu19-Asn244

## Background:

Adiponectin is a secreted protein. It is synthesized exclusively by adipocytes and secreted into plasma. Adiponectin is an important adipokine that is involved in the control of fat metabolism and insulin sensitivity, with direct anti-diabetic, anti-atherogenic and anti-inflammatory activities. Adiponectin stimulates AMPK phosphorylation and activates in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion. Adiponectin also antagonizes TNF-alpha by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. It inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway. Adiponectin 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.