

apm-1, Adipolean (human)
Catalog # PVGS1294**Specification****apm-1, Adipolean (human) - Product Information**Primary Accession [Q15848](#)**Species**
Human**Sequence**KGEPGEGAYV YRSAFSVGL E TYVTIPNMPI RFTKIFYNQ NHYDGGSTGKF HCNIPGLYYF AYHITVYMKD
VKVSLFKKDK AMLFTYDQYQ ENNVDAQSGS VLLHLEVG DQ VWLQVYGE GE RINGLYADNDN DSTFTGFLLY
HDTN**Purity**

> 95% by SDS-PAGE analysis.

Endotoxin Level

< 0.2 EU/ µg, determined by LAL method.

Formulation

Lyophilized after extensive dialysis against PBS.**Reconstitution**Reconstituted in ddH₂O at 100 µg/mL.**apm-1, Adipolean (human) - Additional Information**

Gene ID 9370

Other Names

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-1, Gelatin-binding protein, ADIPOQ

Target Background

gAcrp30/Adipolean is the globular head domain of Adipocyte complement-related protein of 30 kDa (Acrp30), a cytokine expressed in adipocytes. The name of Acrp30 is based on its closest homolog, complement factor c1q, and the globular domain of Acrp30 has an unexpected homolog with the Tumor Necrosis Factor (TNF) family of cytokines. Acrp30 is the isoform of adiponectin, and shares the two receptors with adiponectin: adipoR1 expressed in skeletal muscle, and adipoR2 expressed in liver. The expression level of Acrp30 in adipocytes is negatively correlated with body weight, and is lower in obese mouse than normal mouse. The globular domain of Acrp30 induces free fatty acid oxidation in muscle and weight reduction in mouse, therefore shows potential pharmacological effects in obesity. Recombinant human gAcrp30/Adipolean (rhgAcrp30) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 144 amino acids. A fully biologically active molecule, rhgAcrp30 has a molecular mass of 16.6 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at .

apm-1, Adipolean (human) - Protein Information

Name ADIPOQ

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.

Cellular Location

Secreted.

Tissue Location

Synthesized exclusively by adipocytes and secreted into plasma.

apm-1, Adipolean (human) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

apm-1, Adipolean (human) - Images