10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

apm-1, Adipolean (human)

Catalog # PVGS1294

Product Information

Primary Accession	Q15848
Species	Human
Sequence	KGEPGEGAYV YRSAFSVGLE TYVTIPNMPI RFTKIFYNQQ NHYDGSTGKF HCNIPGLYYF AYHITVYMKD VKVSLFKKDK AMLFTYDQYQ ENNVDQASGS VLLHLEVGDQ VWLQVYGEGE RNGLYADNDN DSTFTGFLLY HDTN
Purity	> 95% by SDS-PAGE analysis.
Endotoxin Level	
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH_2O at 100 □g/mL.

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 bases 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 .

Protein Information

Name	ADIPOQ
Function	Important adipokine involved in the control of fat metabolism and insulin sensitivity upon binding to its receptors ADIPOR1 or ADIPOR2, with direct anti-diabetic effect. Also has anti-atherogenic and anti-inflammatory activities (By similarity). Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion (By similarity). Antagonizes TNF 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 (PubMed:10982546). 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 (By similarity).
Cellular Location	Secreted.
Tissue Location	Synthesized exclusively by adipocytes and secreted into plasma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.