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gAcrp30/Adipolean

Catalog # PVGS1360

Product Information

Primary Accession	Q60994
Species	Mouse
Sequence	Lys104-Asn247 (Val113Met)
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	
Expression System	E. coli
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O up to 100 □g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	11450
Other Names	Adiponectin, 30 kDa adipocyte complement-related protein, Adipocyte complement-related 30 kDa protein, ACRP30, Adipocyte, C1q and collagen domain-containing protein, Adipocyte-specific protein AdipoQ, Adipoq, Acdc, Acrp30, Apm1
Target Background	gAcrp30 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 homology with the Tumor Necrosis Factor (TNF) family of cytokines. Acrp30 is recognized by two receptors: 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, suggesting its potential use as a pharmacological agent in obesity.

Protein Information

Name	Adipoq
Synonyms	Acdc, Acrp30, Apm1
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 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