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

# Adiponectin/Acrp30

Catalog # PVGS1368

## Product Information

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| **Primary Accession** | Q60994 |
| **Species** | Mouse |
| **Sequence** | Val21-Asn247 |
| **Purity** | > 95% as analyzed by SDS-PAGE<br>> 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 dd$H_2O$ or PBS 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

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| **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** | Adiponectin is a hormone mainly produced by adipocytes. Adiponectin forms a homotrimer and exists as higher order multimers in vivo. The receptors of Adiponectin are seven transmembrane G protein coupled receptors: Receptor 1 is expressed in skeletal muscle and Receptor 2 in liver. Adiponectin receives a lot of attention because of its anti-diabetic, anti-atherosclerotic, and anti-inflammatory properties. Adiponectin increases the expression of molecules involved in fatty acid transport, combustion of fatty acid, and energy dissipation, and increases insulin sensitivity of the body. Decreased levels of Adiponectin are associated with hypertension, cardiovascular diseases, and metabolic syndromes. Therefore, Adiponectin has promising potential as a pharmacological agent. |

## Protein Information

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| **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 |