

Recombinant Mouse Adipoq

Cat. No. Adipoq-46M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse adiponectin is 100% homologous with the Mouse serum adiponectin.
Species	Mouse
Source	HEK293
Description	Adiponectin is an important negative regulator in hematopoiesis and immune systems. It may be involved in ending inflammatory responses through its inhibitory functions. Inhibits endothelial nf-kappa-b signaling through a camp-dependent pathway. Inhibits tnf-alpha-induced expression of endothelial adhesion molecules. Involved in the control of fat metabolism and insulin sensitivity.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Purity of adiponectin mouse recombinant is >98% (HPLC and SDS PAGE analyzed).
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in PBS buffer.
Solubility	Add 0.2 ml of deionized water and let the lyophilized pellet dissolve completely.
Activity In Vitro	Full-length adiponectin has been shown to activate AMP-activated protein kinase in hepatocyte. It can also activate AMPK in HepG2 human hepatocytes at the concentration of as low as 1.0 µg/ml. Full-length adiponectin purified from mammalian cells can acutely decrease blood glucose levels. Single subcutaneous injection of

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adiponectin at the dose of 30 mg/g body weight significantly decreased the blood glucose levels in C57 mice. In vitro gluconeogenesis assay in primary rat hepatocytes was performed, showing the murine adiponectin derived from mammalian cells can inhibit glucose production. Effect of murine adiponectin on gluconeogenesis in primary rat hepatocytes. Primary rat hepatocytes were isolated and maintained as we described previously. The cells were then treated with 50 pM insulin plus different concentration of murine adiponectin purified from HEK293 cells for 48 hours. At the end of treatment, the cells were incubated with a glucose-free medium for 6 hours, and glucose production was measured as we described previously (n=4-6).

Applications ELISA, Western blotting Cell culture and/or animal studies.

Storage Store lyophilized APM-1 at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiry date when stored at -20°C.

GENE INFORMATION

Gene Name Adipoq adiponectin, C1Q and collagen domain containing [*Mus musculus*]

Synonyms Adipoq; adiponectin, C1Q and collagen domain containing; APN; Acdc; apM1; 30kDa; GBP28; adipo; Acrp30; adiponectin

Gene ID 11450

mRNA Refseq NM_009605

Protein Refseq NP_033735

UniProt ID Q60994

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Chromosome Location	16 16.0 cM
Pathway	Adipocytokine signaling pathway; PPAR signaling pathway; Type II diabetes mellitus
Function	hormone activity; protein binding; receptor binding

PDB rendering based on 1c28.

