



Recombinant Mouse Adiponectin (Acrp30)

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	M10-009S
Size:	5 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	11450
Synonyms:	Adipoq; APN; Acdc; apM1; 30 kDa; GBP28; adipo; Acrp30

Adiponectin is an adipose-derived secreted protein containing 236 amino acid residues. It is relatively abundant in humans and rodents, accounting for about 0.01% of total plasma protein. The circulating levels of adiponectin are decreased under conditions of obesity, insulin resistance, and type II diabetes. Disruption of adiponectin in mice causes insulin resistance and neointimal formation. Conversely, administration of recombinant adiponectin suppresses hepatic glucose production, and reverses insulin resistance associated with both lipotrophy and obesity. The protective role of adiponectin is attributed to its anti-inflammatory properties (e.g. ability to suppress expression of TNF-beta and class A scavenger receptor in macrophages). Recombinant adiponectin is a multimeric glycoprotein containing amino acids Val-21 to Asn-247 of the adiponectin precursor protein fused to an N-terminal histidine tag. Monomeric glycosylated adiponectin migrates at an apparent molecular weight of approximately 35.0 kDa by SDS PAGE analysis under reducing conditions.

Sequence

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RGHHHHHHHHVTTTEELAPALVPPPKGTCAGWMAGIPGHPHNGTPGRDGRD
GTPGEKGEKGDAGLLGPKGETGDVGMTGAEGPRGFPGTPGRKGEFGEAAAYV
RSAFVSVGLETRVTPVNPVIRFTKIIFYNQNHYDGGSTGKFYCNIPGLYYFSYH
ITVYMKDVKVSFLFKKDKAVLFTYDQYQEKVNDQASGSVLLHLEVGDQVWLQV
YGDGDHNGLYADNVNDSTFTGFLLYHDTN
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Database References

Protein RefSeq:	NP_033735.3
Uniprot ID:	Q60994
mRNA RefSeq:	NM_009605.4

Product Specifications

Expressed in	Insect cells
Purity	> 95% by SDS-PAGE & HPLC analyses
Tag	His-Tag
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	236
MW:	35.0 kDa

Biological Activity: Determined by a cytotoxic assay using M1 cells. The ED50 for this effect is 4.0-6.0 µg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!