

Recombinant Human ADIPOQ, His-tagged

Cat. No. ADIPOQ-199H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant adiponectin produced in *Insect cells* is a multimeric glycoprotein containing amino acids Glu-19 to Asn-244 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.

Species Human

Source Insect Cells

ProteinLength 19-244 a.a.

Description Adiponectin is an adipose-derived secreted protein containing 226 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 lipodystrophy and obesity. The protective role of adiponectin is attributed to its anti-inflammatory properties (e.g. ability to suppress expression of TNF- α and class A scavenger receptor in macrophages).

Purity Greater than 97% (determined by SDS-PAGE and HPLC analysis).

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Endotoxin Level	< 0.1 ng per µg of rHu Acrp30 (1EU/µg).
Biological Activity	Determined by a cytotoxic assay using M1 cells. The ED ₅₀ for this effect is 3.0-6.0 µg/ml.
Form	Lyophilized from a sterile-filtered solution with no additives.
Reconstitution	Please Note: Always centrifuge product before opening vial. The lyophilized protein should be reconstituted with distilled, sterile water to a concentration of 0.1-1.0 mg/ml. For further dilution, carrier protein (0.1% BSA or HSA) should be added to avoid loss of bioactivity.
Storage	The lyophilized protein, though stable at room temperature for up to 3 weeks, is best stored desiccated at -20°C. Reconstituted protein should be used immediately or stored long-term in undiluted working aliquots at -20°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	ADIPOQ adiponectin, C1Q and collagen domain containing [Homo sapiens]
Synonyms	ADIPOQ; adiponectin, C1Q and collagen domain containing; ACDC; ADPN; APM1; APM-1; GBP28; ACRP30; ADIPQTL1; adiponectin; AdipoQ; apM1; adipose most abundant gene transcript 1; Adiponectin; Adipocyte, C1q and collagen domain-containing protein; 30 kDa adipocyte complement-related protein; Adipocyte complement-related 30 kDa protein; Adipose most abundant gene transcript 1 protein; apM-1; Gelatin-binding protein
Gene ID	9370

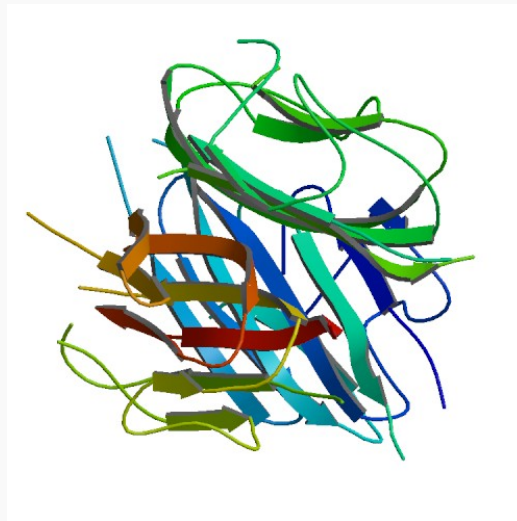
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mRNA Refseq	NM_004797
Protein Refseq	NP_004788
MIM	605441
UniProt ID	Q15848
Chromosome Location	3q27
Pathway	Adipocytokine signaling pathway; PPAR signaling pathway; Type II diabetes melitus
Function	cytokine activity; eukaryotic cell surface binding; hormone activity; protein homodimerization activity

PDB rendering based on 1c28.



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