

Recombinant Human ADIPOQ, His-tagged

Cat. No. ADIPOQ-44H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Adiponectin is created as a recombinant protein with N-terminal fusion of His Tag. The Adiponectin His-Tagged Fusion Protein, produced in <i>E. coli</i> , is 26.4 kDa protein containing 230 amino acid residues of the Acrp30 human and 12 additional amino acid residues-His-tagged (underlined).
Species	Human
Source	<i>E. coli</i>
Description	Adiponectin, also referred to as Acrp30, AdipoQ and GBP-28, is a recently discovered 244 amino acid protein, the product of the apM1 gene, which is physiologically active and specifically and highly expressed in adipose cells (Adipokine). The protein belongs to the soluble defense collagen super family; it has a collagen-like domain structurally homologous with collagen VIII and X and complement factor C1q-like globular domain. APM-1 forms homotrimers, which are the building blocks for higher order complexes found circulating in serum.
Amino Acid Sequence	MRGSHHHHHHSGH DQETTT QGPGVLLPLP K GACTGWMAG IPGHPGHNGA PGRDGRDGTP GEKGEKGDGP LIGPKGDIGE TGVPGAEGPR GFPGIQGRKG EPGEGAYVYR SAFSVGLETY VTIPNMPIRF TKIFYNQNH YDGSTGKFHC NIPGLYYFAY HITVYMKDVK VSLFKKDKAM LFTYDQYQEN NVDQASGSVL LHLEVG DQVW LQVYGEGERN GLYADNDNDS TFTGFLLYHD TN.
Specificity	The amino acid sequence of the APM-1 Human Recombinant is 100% homologous to

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	the amino acid sequence of the Adiponectin human serum.
Purification Method	Three-step procedure using affinity Ni-NTA chromatography and size exclusion chromatography before and after refolding.
Purity	Greater than 95% as determined by SDS-PAGE analyzed.
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in 0.02 M Tris buffer pH7.5, 0.15 M NaCl.
Solubility	Add 0.2 ml of 0.1M Acetate buffer pH4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10g/ml. In higher concentrations the solubility of this antigen is limited.
Quality Control Test	BCA - to determine content of the protein. SDS PAGE - to determine purity of the protein.
Applications	Western blotting.
Storage	Store lyophilized Adiponectin 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 APM-1 remains stable until the expiry date when stored at -20°C.

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; APM1

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	9370
mRNA Refseq	NM_004797
Protein Refseq	NP_004788
UniProt ID	Q15848
Chromosome Location	3q27
MIM	605441
Pathway	Adipocytokine signaling pathway; PPAR signaling pathway; Type II diabetes mellitus
Function	cytokine activity; eukaryotic cell surface binding; hormone activity; protein homodimerization activity
PDB rendering based on 1c28.	