

Active Recombinant Human ADIPOQ, Trimeric Form

Cat. No. ADIPOQ-47H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Trimeric form of Recombinant Human Adiponectin trimeric form was expressed in HEK293 cells. The cysteine 39 was replaced with Alanine (C39A) 9. hAd-C39A can only form trimer, but not hexamer or HMW form.
Species	Human
Source	HEK293
Description	Adiponectin is a hormone exclusively expressed from adipose tissue. Many studies demonstrate that Adiponectin has direct anti-diabetic, anti-atherogenic and anti-inflammatory functions. APM-1 can increase insulin sensitivity of skeletal muscle. Attenuate hepatic lipogenesis and gluconeogenesis, regulate NO production in endothelial cells, inhibit proliferation of smooth muscle cells and prevent lipid accumulation of macrophage cells. In the circulation, Adiponectin is present as three different oligomeric complexes, including the high molecular weight (HMW), the middle molecular weight (MMW, also called hexamer) and low molecular weight (MMW, also called trimer) forms 8. Different oligomeric complex of Adiponectin activates different signaling pathways and exerts distinct functions.
Purity	Greater than 95% as determined by SDS-PAGE.
Amino Acid Sequence	ETTTQGPGVL LPLPKGAATG WMAGIPGHPG HNGAPGRDGR DGTPGEKGEK GDPGLIGPKG DIGETGVPGA EGPRGFPGIQ GRKGEPGEGA YVYRSAFSVG LETYVTIPNM PIRFTKIFYN QQNHYDGSTG KFHCNIPGLY YFAYHIVYMK

 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

	DVKVSLFKKD KAMLFTYDQY QENNVDQASG SVLLHLEVGD QVWLQVYGEG ERNGLYADND NDSTFTGFL YHDTNDYKDD DDK.
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M phosphate buffer, 0.05M NaCl, pH 7.2.
Solubility	Add 0.2 ml of deionized water and let the lyophilized pellet dissolve completely.
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 AdipoQ remains stable until the expiry date when stored at -20°C.
Activity	ED50= 3-8.5 µg/mL, as determined by its ability to inhibit proliferation of HASMCs induced by HB EGF.
Applications	In vitro, ex vivo and in vivo activity analysis, binding assay et al.
OfficialSymbol	ADIPOQ

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; gelatin-binding protein 28; adipose specific collagen-like factor; 30 kDa adipocyte complement-related protein; adipocyte complement-related 30 kDa protein; adipose most abundant gene transcript 1 protein
Gene ID	9370

 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

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 mellitus
Function	cytokine activity; eukaryotic cell surface binding; hormone activity; protein homodimerization activity
PDB rendering based on 1c28.	