

ADIPOQ

Recombinant Human Adiponectin, Trimeric form

Catalog No.	CRA106A CRA106B CRA106C	Quantity:	2 µg 10 µg 1.0 mg
Alternate Names:	Adipocyte complement-related 30 kDa protein, Acrp30, 30 kDa adipocyte complement-related protein, Gelatin-binding protein, Adipocyte, C1q and collagen domain-containing protein		
Description:	<p>The cysteine 39 was replaced with alanine (C39A) 9. Adiponectin-C39A can only form trimer, not hexamer or HMW form.</p> <p>Adiponectin is a 30 kDa multimeric protein and is secreted mainly by white adipose tissue, although other tissues express low levels of adiponectin too. Full-length human adiponectin comprises 244 amino acid residues, including a N-terminal hyper-variable region (amino acids from 1–18), followed by a collagen-like domain structurally homologous with collagen VIII and X, consisting of 22 Gly-XY repeats, and a C-terminal C1q-like globular domain (amino acids from 108–244). In contrast to humans, mouse adiponectin is a 247 amino acid long protein. Adiponectin is secreted from adipocytes into the bloodstream as three oligomeric complexes, including trimer (67 kDa), hexamer (140 kDa), and a HMW (300 kDa) multimer comprising of at least 18 monomers. The monomeric form of adiponectin is undetectable in native conditions.</p> <p>Adiponectin is thought to play an important role in hyperglycemia, insulin resistance, cognitive decline in obesity, and signals through receptors, AdipoR1 and AdipoR2. T-cadherin as a receptor for hexameric and HMW forms of adiponectin.</p>		
UniProt ID:	Q15848		
Gene ID:	9370		
Source:	HEK293 (Human embryonic kidney cell line)		
Formulation:	Lyophilized from a 0.4 µm filtered 50 mM phosphate buffer, 75 mM NaCl, pH 7.4		
Purity:	> 95% as determined by SDS-PAGE analysis		
Endotoxin Level:	< 0.1 ng/µg of Adiponectin		
Biological Activity:	ED ₅₀ = 3.0 - 8.5 µg/ml, as determined by its ability to inhibit proliferation of HASMCs induced by HB EGF.		
Amino Acid Sequence:	ETTTQGPVGL LPLPKGAATG WMAGIPGHPG HNGAPGRDGR DGTPGEKGEK GDPGLIGPKG DIGETGVPGA EGPRGFPGIQ GRKGPEGEGA YVYRSAFSVG LETYVTIPNM PIRFTKIFYN QQNHVDGSGTGF KFHCHNIPGLY YFAYHIVYMK DVKVSLFKKD KAMLFTYDQY QENNVQASG SVLLHLEVGD QVWLQVYGEK ERNGLYADND NDSTFTGFLL YHDTNDYKDD DDK		
Reconstitution:	Centrifuge vial prior to opening. Add deionized water to the vial to fully solubilize the protein to a concentration of 0.5 mg/ml. Note: Product not sterile. Please filter product by an appropriate sterile filter before using it in cell culture.		
Storage & Stability:	Lyophilized protein is stable at -20°C to -80°C for up to 1 year and reconstituted protein is stable for 2 weeks at 2-8°C. Recommended to store aliquots of reconstituted product at -20°C to -80°C. Avoid repeated freeze-thaw cycles.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

cellsciences.com



Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com