

## Adipoq

### Recombinant Mouse Adiponectin / ACRP30, FLAG-tag

<b>Catalog No.</b>	CRA027A CRA027B CRA027C	<b>Quantity:</b>	2 µg 10 µg 1 mg
<b>Alternate Names:</b>	Adipocyte complement-related 30 kDa protein, Acrp30, 30 kDa adipocyte complement-related protein, Gelatin-binding protein, Adipocyte, C1q and collagen domain-containing protein		
<b>Description:</b>	<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>		
<b>UniProt ID:</b>	Q60994		
<b>Gene ID:</b>	11450		
<b>Source:</b>	HEK293 (Human Embryonic Kidney cell line)		
<b>Molecular Weight:</b>	26 kDa		
<b>Formulation:</b>	Lyophilized from a 0.4 µm filtered 50 mM phosphate buffer, 75 mM NaCl, pH 7.4		
<b>Purity:</b>	>98% by HPLC and SDS-PAGE analyses		
<b>Biological Activity:</b>	Full-length Recombinant Mouse Adiponectin activates AMP activated Protein Kinase in hepatocyte and activates AMPK in HepG2 Human hepatocytes at a concentration of 1µg/ml. Recombinant Mouse Adiponectin inhibits glucose production as shown by <i>in-vitro</i> gluconeogenesis assay in primary Rat hepatocytes.		
<b>Amino Acid Sequence:</b>	EDDVTTTEEL APALVPPPKG TCAGWMAGIP GHPGHNGTPG RDGRDGTPGE KGEKGDAGLL GPKGETGDVG MTGAEGPRGF PGTPGRKGEP GEAAYMYRSA FSVGLETRVT VPNVPIRFTK IFYNQQNHVD GSTGKFYCNV PGLYYFSYHI TVYMKDVKVS LFKKDKAVLF TYDQYQEKV DQASGSVLLH LEVGDQVWLQ VYGDGDHNGV YADNVNDSTF TGFLLYHDTN DYKDDDDK		



**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.**



**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](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)