

**Adiponectin Human Recombinant, Trimeric form**

Catalogue Number	IY-233
Synonyms	Acrcp30, AdipoQ, GBP-28, APM-1, ACDC.
Introduction	<p>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.</p> <p>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 (LMW, also called trimer) forms. Different oligomeric complex of Adiponectin activates different signaling pathways and exerts distinct functions.</p>
Patent Rights	The sale and/or commercial use of Recombinant Adiponectin is prohibited in the United States of America (U.S.A).
Description	Trimeric form of Adiponectin Human trimeric form was expressed in HEK293 cells. The cysteine 39 was replaced with Alanine (C39A). hAd-C39A can only form a trimer, but not a hexamer or an HMW form.
Source	HEK293 (Human embryonic kidney cell line).
Physical Appearance	Filtered White lyophilized (freeze-dried) powder.
Formulation	Filtered (0.4µm) and lyophilized from 0.5 mg/ml in 0.05M phosphate buffer, 0.05M NaCl, pH 7.4.
Solubility	Add deionized water to a working volume of 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.
Stability	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.
Purity	Greater than 95% as determined by SDS-PAGE.
Activity	ED50= 3-8.5 µg/ml, as determined by its ability to inhibit proliferation of HASMCs induced by HB EGF.
Amino acid sequence	<p>ETTTQGGV L LPLPKGAATG WMAGIPGHPG HNGAPGRDGR DGTPGEKGEK          GDPGLIGPKG DIGETGVPGA EGPRGFPGIQ GRKGEPGE GA YVYRSAFEVSG          LETYVTIPNM PIRFTKIFYN QQNHYDGTG KFH CNIPGLY YFAYHIVYMK          DVKVSFLFKD KAMLFYDQY QENNVDAQSG SVLLHLEVGD QVWLQVYGE G          ERNGLYADND NDSTFTGFLL YHDTNDYKDD DDK.</p>

Usage	Products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.
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