

## Recombinant Human Adiponectin HEK derived (rh Acrp30 HEK)

**Synonyms:** APM-1.

**Introduction:** Adiponectin is 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. Adiponectin is produced and secreted exclusively by adipocytes, and is a relatively abundant plasma protein, accounting for up to 0.05% of total serum protein. Adiponectin forms homotrimers, which are the building blocks for higher order complexes found circulating in serum. It is capable of decreasing hyperglycemia and reversing insulin resistance.

**Description:** Human recombinant Adiponectin produced in HEK293 is a single polypeptide chain containing 244 amino acids. Adiponectin is fused with FLAG-tag.

**Source:** HEK293(Human Embryonic Kidney cell line)

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Filtered (0.4µm) and lyophilized from 0.5mg/ml in 50mM phosphate Buffer, 75mM NaCl, pH 7.4. The aliquots of 1µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** Add deionized water to prepare a working stock of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product not sterile! Please filter the product by an appropriate sterile filter before using it in cell culture.

**Stability:** For long term store lyophilized Adiponectin at -20°C aliquot the product. 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 protein remains stable for 24 months when stored at -20°C. After reconstitution avoid repeated freezing/thawing cycles.

**Purity:** Greater than 98.0% as determined by HPLC and SDS-PAGE.

**Amino Acid Sequence:** ETTTQGGPVL LPLPKGACTG WMAGIPGHPG HNGAPGRDGR DGTPGEKGEK  
GDPGLIGPKG DIGETGVPGA EGPRGFPGIQ GRKGEPGEGA YVYRSAFSVG LETYVTIPNM PIRFTKIFYN  
QQNHYDGSTG KFHCNIPGLY YFAYHIVYMK DVKVSFLFKKD KAMLFTYDQY QENNVDQASG SVLLHLEVGD  
QVWLQVYGEGERNGLYADND NDSTFTGFLLYHDTNDYKDDDDK.

**Activity in vitro:** In vitro gluconeogenesis assay in primary hepatocytes was performed, showing the Adiponectin human derived from mammalian cells can inhibit glucose production. The ED50 was ~6 µg/ml.

**Application:** ELISA, Western blotting, cell culture and/or animal studies.

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<i>small</i>	2 µg	Cat.N°	11344462
<i>medium</i>	10 µg	Cat.N°	11344463

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