

Adiponectin/ACRP30, Human

Cat.no. PK0180

Product size: 10ug 50ug 1mg

Source: E. coli

Species: Human

Biological Activity: ED50 < 5 µg/mL, measured by a cell growth inhibitory assay using M1 cells, corresponding to a specific activity of > 2 × 10² units/mg.

Molecular Weight: 24.7 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 50 mM Tris, 150 mM NaCl, pH8.0.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Adiponectin (rhAdiponectin) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhAdiponectin remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

Description: Adiponectin is a hormone mainly produced by adipocytes. Adiponectin forms a homotrimer and exists as higher order multimers in vivo. The receptors of Adiponectin are seven-transmembrane G protein coupled receptors: Receptor 1 is expressed in skeletal muscle and Receptor 2 in liver. Adiponectin receives a lot of attention because of its anti-diabetic, anti-atherosclerotic, and anti-inflammatory properties. Adiponectin increases the expression of molecules involved in fatty acid transport, combustion of fatty acid, and energy dissipation, and increases insulin sensitivity of the body. Decreased levels of Adiponectin are associated with hypertension, cardiovascular diseases, and metabolic syndromes. Therefore, Adiponectin has promising potential as a pharmacological agent. Recombinant human Adiponectin (rhAdiponectin) produced in E. coli is a single non-glycosylated polypeptide chain containing 227 amino acids.

Amino Acid Sequence:

00001 METTTQGPV LLPLPKGACT GWMAGIPGHP GHNGAPGRDG

00041 RDGTPGEKGE KGDPGLIGPK GDIGETGVPG AEGPRGFPGI

00081 QGRKGEPGEG AYVYRSAFSV GLETYVTIPN MPIRFTKIFY

00121 NQQNHYDGST GKFHCNIPGL YYFAYHITVY MKDVKVSLFK

00161 KDKAMLFTYD QYQENNVDQA SGSVLLHLEV GDQVWLQVYG

00201 EGERNGLYAD NDNDSTFTGF LLYHDTN

Synonyms: Adiponectin, 30 kDa adipocyte complement-related protein, Adipocyte complement-related 30 kDa protein, ACRP30, Adipocyte, C1q and collagen domain-containing protein, Adipose most abundant gene transcript 1 protein, apM-1, apM1, Gelatin-binding protein, ADIPOQ, ACDC, ACRP30, APM1, GBP28

Note: For research use only, not for use in diagnostic procedure.