



Adiponectin, human recombinant (rHuAcrp30)

Catalog No: 94913
Lot No: XXXXX
Source: *E. coli*
Synonyms: Acrp30, AdipoQ, GBP-28, APM-1, ACDC

Background

The adipose tissue exclusively expresses and secretes Adiponectin (Acrp30). Acrp30 is involved in various physiological processes such as energy homeostasis, insulin sensitivity, hormonal processes, fatty acid metabolism and obesity. Adiponectin circulates in the plasma. Decreased levels of Adiponectin are associated with insulin resistance and hyperinsulinemia, as seen in people with obesity insulin resistance, and diabetes type 2, whose plasma levels of adiponectin are reduced. The modular structure of Acrp30 is comprised of N-terminal collagenous domain followed by a C-terminal globular domain. Acrp30 also acts as a significant negative regulator in hematopoiesis and immune systems; it may be involved in ending inflammatory responses through its inhibitory functions. Adiponectin inhibits endothelial NF-kappa-b signaling through a cAMP-dependent pathway, it also inhibits TNF-alpha- induced expression of endothelial adhesion molecules.

Description

Adiponectin human recombinant protein is a single, non-glycosylated polypeptide chain produced in *E. coli*, having a molecular weight of 25.1 kDa and containing 231 amino acids (15-244).

Physical Appearance

Sterile filtered clear solution.

Formulation

Acrp30 is liquid 1 mg/ml in PBS, pH 7.4 containing 1 mM DTT.

Stability

Store Acrp30 at -20°C. Can be stored at 4°C for a limited period of time of 7 days.

Purity

Greater than 90% as determined by SDS-PAGE.

Amino Acid Sequence

MGHDQETTTQ GPGVLLPLPK GACTGWMAGI PGHPGHNGAP GRDGRDGTGP EKGEKGDPG LIGPKGDIGE TGVPGAEGPR
GFPGIQGRKG EPGEGAYVYR SAFSVGLETY VTIPNMPIRF TKIFYNQNH YDGSTGKFH CNIPGLYYFA YHITVYMKDV
KVSLFKKDKA MLFTYDQYQE NNVDQASGSV LLHLEVGDQV WLQVYGEGER NGLYADNDN DSTFTGFLLY HDTN

Usage

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