i-DNA Biotechnology Pte Ltd

Data Sheet

Adiponectin Human Recombinant

Catalogue Number	IY-280
Synonyms	Acrp30, AdipoQ, GBP-28, APM-1, ACDC.
Introduction	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.
Patent Rights	The sale and/or commercial use of Recombinant Adiponectin is prohibited in the United States of America (U.S.A).
Description	The Adiponectin Human recombinant protein is a single, non-glycosilated polypeptide chain produced in E. coli, having a molecular weight of 25.1 kDa and containing 231 amino acids (15-244).
Source	Escherichia Coli.
Physical Appearance	Sterile Filtered clear solution.
Formulation	Acrp30 is liquid 1mg/ml in PBS, pH 7.4 containing 1mM DTT.
Storage	Store Acrp30 at -20°C. Can be stored at 4°C for a limited period of time of 7 days.
Purity	Acrp30 purity is greater than 90% as determined by SDS-PAGE.
Amino acid sequence	MGHDQETTTQGPGVLLPLPKGACTGWMAGIPGHPGHNGAPGRDGRDGTPGE KGEKGDPGLIGPKGDIGETGVPGAEGPRGFPGIQGRKGEPGEGAYVYRSAFSV GLETYVTIPNMPIRFTKIFYNQQNHYDGSTGKFHCNIPGLYYFAYHITVYMKD VKVSLFKKDKAMLFTYDQYQENNVDQASGSVLLHLEVGDQVWLQVYGEGE RNGLYADNDNDSTFTGFLLYHDTN.
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.