GFH156AF Recombinant Human ACRP-30 (Animal-Free)

Description

The globular subunit of adipocyte complement-related protein of 30 kDa (globular ACRP-30) is a naturally occurring cleavage product of adiponectin. Produced exclusively by adipocytes, globular ACRP-30 is an abundant serum protein and plays an important role in hyperglycemia, insulin resistance, and fatty acid oxidation. Globular ACRP-30 signals through adiponectin receptor 1 (AdipoR1) and adiponectin receptor 2 (AdipoR2).

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	145 aa
Molecular Weight	16.7 kDa
Source	E. coli
Accession Number	Q15848
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

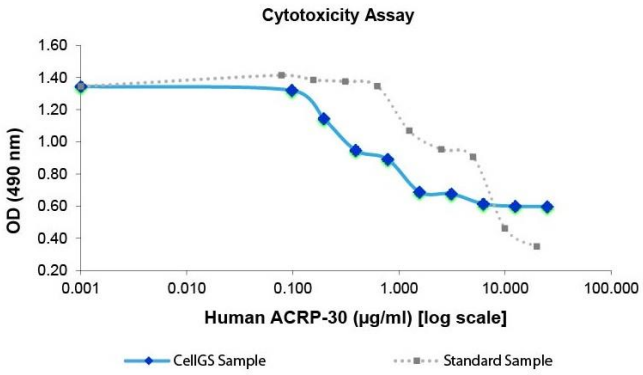
Specifications

Alternative Names	Adiponectin, adipolean, ACRP30, globular domain of Acrp30, apm-1, APM-1, apM-1, APM1, apM1, C1Q and collagen domain containing, ACDC, ADPN, GBP28, ADIPQTL, AdipoQ, gelatin-binding protein 282, adipocyte, 30 kDa adipocyte complement-related protein, adipocyte complement-related 30 kDa protein, adipose most abundant gene transcript 1 protein, gelatin-binding protein
Biological Activity	Human ACRP-30 is fully biologically active when compared to standard. The activity is determined by the ability to inhibit the proliferation of mouse M1 cells and it is typically 2 ng/ml. This corresponds to an expected specific activity superior to 500 units/mg.
Endotoxin Level	≤1.00 EU/µg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM Sodium Phosphate, 0.75 mM DTT, pH 8.0
AA Sequence	MKGEPGEGAY VYRSAFSVGL ETYVTIPNMP IRFTKIFYNQ QNHYDGSTGK FHCNIPGLYY FAYHITVYMK DVKVSLFKKD KAMLFTYDQY QENNVDQASG SVLLHLEVGD QVWLQVYGEG ERNGLYADND NDSTFTGFLL YHDTN

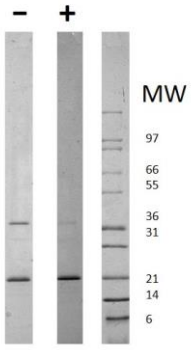
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM Sodium Phosphate and 0.5 mM DTT, pH 7.5, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Cytotoxicity assay for Human ACRP-30. Cell viability was measured to calculate the ED50, which is in the expected range of 1.0 – 2.5 µg/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 µg of protein was loaded in each lane. Human ACRP-30 has a predicted Mw of 16.7 kDa.