

Cytokines

Human Recombinant gAdiponectin (gAcrp30), ACF



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Catalog #100-0937
100-0938

100 µg
1000 µg

Product Description

gAdiponectin, also known as an adipocyte component-related protein of 30 kDa, is a member of defense collagens, and its structure is similar to C1q—a member of the complement-related family of proteins (Chandran et al.). gAdiponectin is expressed by differentiated adipocytes and it is composed of three defined domains: N-terminus-containing hypervariable region, collagenous stalk containing 22 GXY repeats, followed by a C-terminus globular domain (Wang et al.). gAdiponectin has also been identified as a hematopoietic stem cell growth factor (DiMascio et al.), and is known to regulate bone marrow mesenchymal stem cell niche (Yu et al.). The globular domain of adiponectin (gAcrp30) has been shown to significantly reduce plasma-free fatty acids and glucose levels in mice (Wong et al.), and to regulate glucose and fatty acid uptake and oxidation in cardiomyocytes (Palanivel et al.). This product is animal component-free.

Product Information

Alternative Names:	Acrp30, AdipoQ, APM-1, GBP-28, globular domain of adiponectin
Accession Number:	Q15848 (Lys101-Asn244) was expressed with an additional Met
Amino Acid Sequence:	MKGEPGEGAY VYRSAFSVGL ETYVTIPNMP IRFTKIFYNQ QNHYDGSTGK FHCNIPGLYY FAYHITVYMK DVKVSFLFKKD KAMLFTYDQY QENNVDQASG SVLLHLEVGD QVWLQVYGEGERNGLYADND NDSTFTGFLL YHDTN
Predicted Molecular Mass:	16.7 kDa
Species:	Human
Formulation:	Lyophilized from a sterile-filtered aqueous solution containing 10 mM sodium phosphate and 0.5 mM DTT, pH 7.5.
Source:	<i>E. coli</i>

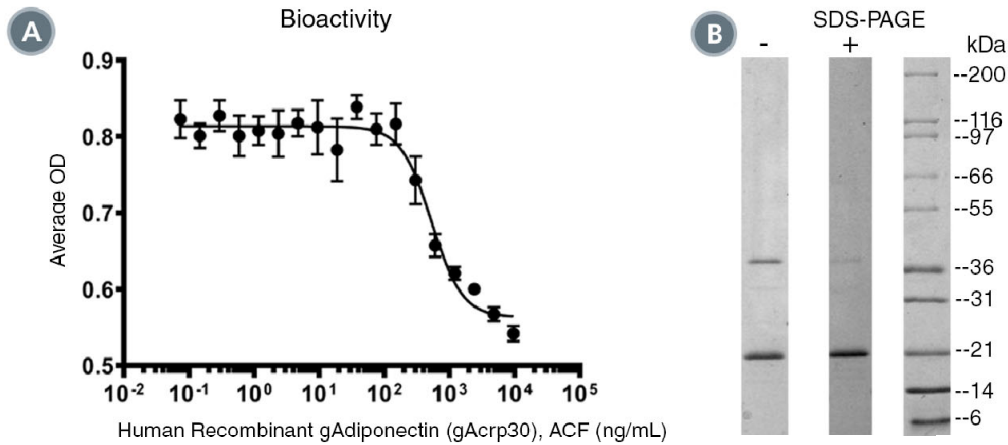
Specifications

Activity:	The specific activity is ≥ 500 units/mg ($EC_{50} \leq 2000$ ng/mL) as determined by inhibition of M1 cell proliferation.
Purity:	$\geq 90\%$
Endotoxin Level:	Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is ≤ 1.0 EU/µg protein.

Preparation and Storage

Storage:	Store at -20°C to -80°C .
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at $2 - 8^{\circ}\text{C}$ for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Human Recombinant gAdiponectin (gAcrp30), ACF was tested by its ability to inhibit M1 cell proliferation. The EC₅₀ is defined as the effective concentration of growth factor at which cell proliferation is at 50% of maximum. The EC₅₀ in the above example is 521 ng/mL.

(B) Human Recombinant gAdiponectin (gAcrp30), ACF was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Human Recombinant gAdiponectin (gAcrp30), ACF has a predicted molecular mass of 16.7 kDa.

Related Products

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References

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