abcam

Product datasheet

Recombinant human Adiponectin protein ab78588

画像数 3

製品の詳細

製品名	Recombinant human Adiponectin protein
生理活性	Biological Activity: Adiponectin is fully biologically active when compared to standard. Activity is determined by the ability to inhibit the proliferation of mouse M1 cells. The expected ED_{50} for this effect is 1.0 - 2.5 µg/ml.
精製度	> 95 % SDS-PAGE. Purity Approximately 90% as determined by: - Analysis by RP-HPLC. - Reducing and non-reducing SDS-PAGE. This product was filter sterilised.
発現系	Escherichia coli
タンパク質長	Protein fragment
Animal free	No
由来	Recombinant
生物種	Human
配列	MKGEPGEGAY VYRSAFSVGL ETYVTIPNMP IRFTKIFYNQ QNHYDGSTGK FHCNIPGLYY FAYHITVYMK DVKVSLFKKD KAMLFTYDQY QENNVDQASG SVLLHLEVGD QVWLQVYGEG ERNGLYADND NDSTFTGFLL YHDTN
領域	101 to 244

特性

Our **Abpromise guarantee** covers the use of **ab78588** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	SDS-PAGE
製品の状態	Lyophilized
備考	For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

前処理および保存

保存方法および安定性	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Constituents: 0.01155% DTT, 0.121% Tris

This product is an active protein and may elicit a biological response in vivo, handle with caution.

再構成

Reconstitute with sterile 5 mM Tris, pH 8.0 + 0.75 mM DTT at 0.1 - 1.0 mg/ml, which can then be further diluted to other aqueous solutions.

関連情報

機能

Important adipokine involved in the control of fat metabolism and insulin sensitivity, with direct anti-diabetic, anti-atherogenic and anti-inflammatory activities. Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion. Antagonizes TNF-alpha by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. Inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway. May play a role in cell growth, angiogenesis and tissue remodeling by binding and sequestering various growth factors with distinct binding affinities, depending on the type of complex, LMW, MMW or HMW.

組織特異性

Synthesized exclusively by adipocytes and secreted into plasma.

関連疾患

Defects in ADIPOQ are the cause of adiponectin deficiency (ADPND) [MIM:612556]. ADPND results in very low concentrations of plasma adiponectin.
Genetic variations in ADIPOQ are associated with non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853]; also known as diabetes mellitus type 2. NIDDM is characterized by an autosomal dominant mode of inheritance, onset during adulthood and insulin resistance.

配列類似性

Contains 1 C1q domain.
Contains 1 collagen-like domain.

ドメイン

The C1q domain is commonly called the globular domain.

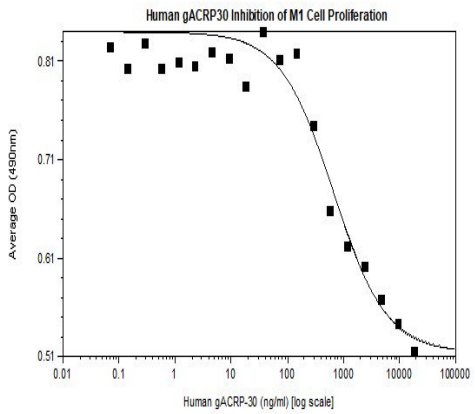
翻訳後修飾

Hydroxylated Lys-33 was not identified in PubMed:16497731, probably due to poor representation of the N-terminal peptide in mass fingerprinting.
HMW complexes are more extensively glycosylated than smaller oligomers. Hydroxylation and glycosylation of the lysine residues within the collagene-like domain of adiponectin seem to be critically involved in regulating the formation and/or secretion of HMW complexes and consequently contribute to the insulin-sensitizing activity of adiponectin in hepatocytes.
O-glycosylated. Not N-glycosylated. O-linked glycans on hydroxylysines consist of Glc-Gal disaccharides bound to the oxygen atom of post-translationally added hydroxyl groups. Sialylated to varying degrees depending on tissue. Thr-22 appears to be the major site of sialylation. Higher sialylation found in SGBS adipocytes than in HEK fibroblasts. Sialylation is not required neither for heterodimerization nor for secretion. Not sialylated on the glycosylated hydroxylysines. Desialylated forms are rapidly cleared from the circulation.

細胞内局在

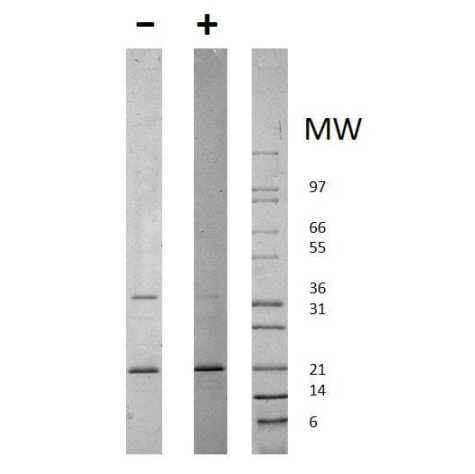
Secreted.

画像



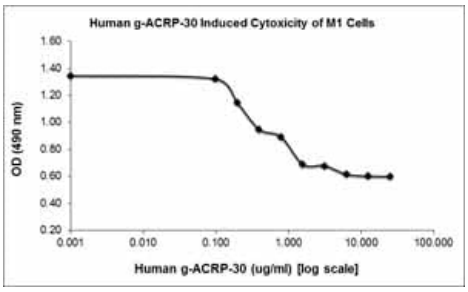
Functional Studies - Recombinant human Adiponectin protein (ab78588)

Functional analysis of ab78588



SDS-PAGE - Recombinant human Adiponectin protein (ab78588)

SDS PAGE analysis of ab78588 under non-reducing (-) and reducing (+) conditions. Stained with Coomassie Blue.



Functional Studies - Recombinant human Adiponectin protein (ab78588)

ab78588 used in Functional Studies.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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