Resistin Mouse E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Mouse
Other names: Cysteine-rich secreted protein FIZZ3, Adipose tissue-specific secretory factor, ADSF, C/EBP-epsilon-regulated myeloid-specific secreted cysteine-rich protein, Cysteine-rich secreted protein A12-alpha-like 2, RETN, FIZZ3, HXCP1, RSTN, UNQ407/PRO1199

Cat. No.:
RD272016300 (0.1 mg)

Description

Total 124 AA. MW: 13.7 kDa (calculated). N-Terminal signal sequence of phage fd 21 AA and C-Terminal Flag-tag 9 AA (highlighted).

Introduction to the Molecule

Resistin is a peptide hormone belonging to the class of cysteine-rich secreted proteins. It is a product of the RSTN gene. Human resistin contains 108 amino acids as a prepeptide and its hydrofobic signal peptide is cleaved before its secretion. Resistin circulates in human blood as a dimeric protein consisting of two 92 amino acid polypeptides, which are disulfide-linked via Cys26. Resistin may be an important link between obesity and insulin resistance. Mouse resistin, specifically produced and secreted by adipocyte, affects skeletal muscle myocytes, hepatocytes and adipocytes themselves so that it reduces their sensitivity to insulin. Steppan et al. have suggested that resistin suppresses the ability of insulin to stimulace glucose uptake. They have also suggested that resistin is present at elevated levels in blood of obese mice, and is down regulated by fasting and antidiabetic drugs. Way et al., on the other hand, have found that resistin expression is severly suppressed in obesity and is stimulated by several antidiabetic drugs. Other studies have shown that mouse resistin increases during the differentiation of adipocytes, but it also seems to inhibit adipogenesis. In contrast, the human adipogenic differentiation is likely to be associated with a down regulation of resistin gene expression. Recent research have shown that human resistin is expressed also in macrophages and may be a novel link between inflammation and insulin resistance.

Research topic

Animal studies, Energy metabolism and body weight regulation

Amino Acid Sequence

MKKLLFAIPL VVPFYSHSTM ASMPLCPIDE AIDKKIKQDF NSLFPNAIKN IGLNCWTVSS RGKLASCPEG TAVLSCSCGS ACGSWDIREE KVCHCQCARI DWTAARCCKL QVAS**LEDYKD DDDK**

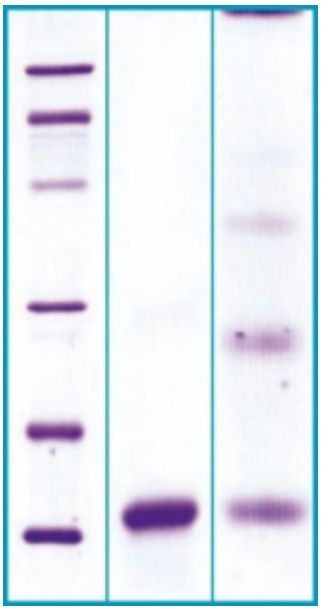
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Mouse Resistin
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 5µg/lane
3. non-reduced and non-heated sample, 5µg/lane

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 0.05 M Acetate buffer pH4

Reconstitution

Add 0.1M Acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/mL. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.

Applications

ELISA, Western blotting

Note

This product is intended for research use only. The recombinant protein is for research use only.

References to this Product

- Pravenec M, Kazdova L, Cahova M, Landa V, Zidek V, Mlejnek P, Simakova M, Wang J, Qi N, Kurtz TW . *Fat-specific transgenic expression of resistin in the spontaneously hypertensive rat impairs fatty acid re-esterification.* Int J Obes (Lond) . Jul;30(7):1157-9 (2006)

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