Resistin Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
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.:
RD372016300 (0.1 mg)

Description

Total 110 AA. MW: 11.9 kDa (calculated). N-Terminal His-tag 16 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. Mouse resistin is also known to increase during the differentiation of adipocytes, but it inhibits 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

MRGSHHHHHH GMASHMPSMS LCPMDEAISK KINQDFSSLL PAAMKNTVLH CWSVSSRGRL ASCPEGTTVT SCSCGSGCGS WDVREDTMCH CQCGSIDWTA ARCCTLRVGS

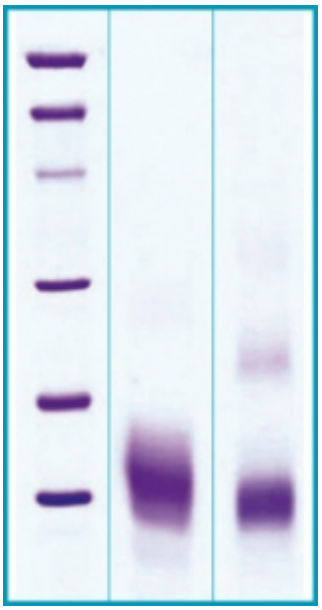
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Rat Resistin
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 10µg/lane
3. non-reduced and non-heated sample, 10µg/lane

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 20mM Tris pH 8.0

Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. 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.

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