



Resistin-Like Molecule-beta Human E. coli

Product Data Sheet

Type: Recombinant

Source: E. coli

Species: Human

Cat. No.:

RD172047100 (0.1 mg)

Other names: RELM-beta, Resistin-like beta, RELMbeta, Cysteine-rich secreted protein FIZZ2, Colon and small intestine-specific cysteine-rich protein, Cysteine-rich secreted protein A12-alpha-like 1, Colon carcinoma-related gene protein, RETNLB, CCRG, FIZZ2, HXCP2, RETNL2, UNQ408

Description

Total 102 AA. MW: 11 kDa (calculated). C-Terminal His-tag 12 AA (highlighted).

Introduction to the Molecule

RELM-beta (Resistin-Like Molecule-beta) is a member of the family of secreted proteins containing a conserved cystein-rich C-terminus. The RELM family consists of resistin (also called FIZZ3), RELM-alfa (FIZZ1), RELM-beta (FIZZ2) and RELM-gamma. Only resistin and RELM-beta are present in humans, whereas all four RELM family members are found in rodents.

RELM-beta appears to be produced as a homodimer exclusively by intestinal goblet cells and can be found in high quantities in stool. Remarkably, stool of germ-free mice displaying sterile intestinal tract does not contain RELM-beta until bacterial colonization takes place after pathogen-free mice entered natural environment. Some, but not all, colon carcinoma cell lines secrete RELM-beta into the cell culture supernatant. The physiological function of RELM-beta is unclear. High doses of recombinant RELM-beta showed hyperglycemic effects including lowered glucose disposal and increased hepatic glucose production in mice.

Research topic

Energy metabolism and body weight regulation

Amino Acid Sequence

MGSTQCSLDS VMDKKIKDVL NSLEYSPSPI SKKLSCASVK SQGRPSSCPA GMAVTGCACG YCGGSWDVQL ETTCHCQCSV
VDWTTARCCH LTKLRSHHHH HH

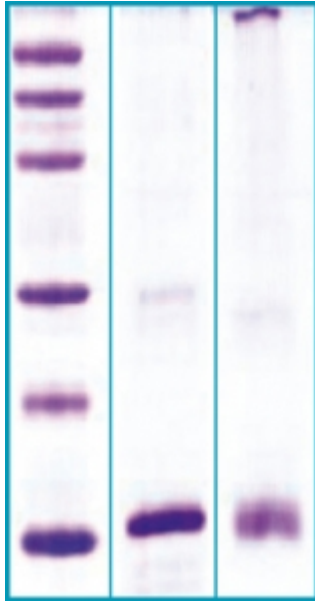
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Human RELM beta

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 0.05M 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

Western blotting

Note

This product is intended for research use only.

**Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium
<http://www.gentaur-worldwide.com>**