Document has been modified!
Clara Cell Protein Human E.coli has been renamed to Club Cell Protein (CC16) Human E.coli. This change respects a name-change policy of the major respiratory journals (including the journals of the American Thoracic Society, the European Respiratory Society and the American College of Chest Physicians) that went into effect beginning January 1, 2013.
Should you have any question, please contact the Technical Support Department.

BioVendor
Research
and Diagnostic Products

Club Cell Protein (CC16) Human E.coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: CC10, CC16, uteroglobin, urinary protein 1, Clara Cell Secretory Protein

Cat. No.:
RD172022100 (0.1 mg)

Description

Total 80 AA. MW: 9.2 kDa (calculated). N-Terminal His-tag (10 extra AA). UniprotKB acc.no. P11684

Introduction to the Molecule

Human Club Cell Protein (CC16, CC10 and also called uteroglobin, urinary protein 1 or Clara Cell Secretory Protein) belongs to the family of secretoglobins and is a secreted protein product of non-ciliated bronchiolar Club cells. Its function remains to be elucidated but there is convincing data suggesting its phospholipase A2 inhibitory activity as well as a number of other immunomodulatory features including inhibition of interferon gamma signaling and Th1 vs. Th2 lymphocyte regulation. It was proposed as a potential peripheral marker of respiratory epithelial injury and bronchial dysfunction. In serum, its increase is associated with age, asbestos, nitrogen chloride and ozone exposure, sarcoidosis and high PEEP ventilation. Decreased serum CC16 levels are found after pulmonary resection, in silica-exposed workers, smokers and in asthma. Decreased CC16 concentrations were also found in the amniotic fluid of fetuses suffering from pulmonary hypoplasia caused by various mechanisms (diaphragmatic hernia, diabetic fetopathy, Turner and Down syndrome).

Research topic

Immune Response, Infection and Inflammation, Pulmonary diseases

Amino Acid Sequence

MKHHHHHHAS EICPSFQRVI ETLLMDTPSS YEAAMELFSP DQDMREAGAQ LKKLVDTLPQ KPRESIIKLM EKIAQSSLCN

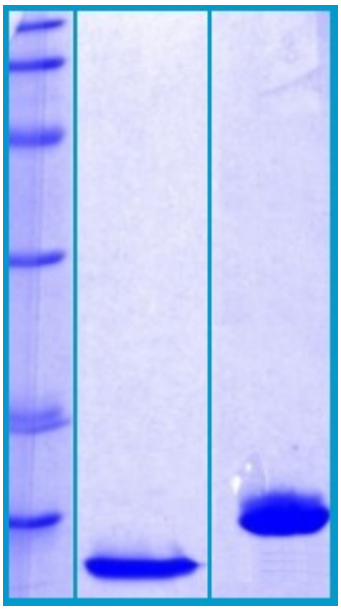
Source

E. coli

Purity

Purity as determined by densitometric image analysis: >90%

SDS-PAGE gel



14% SDS-PAGE separation of Club Cell Protein
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and boiled sample, 2.5µg/lane
3. non-reduced and non-boiled sample, 2.5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/ml solution in phosphate buffered saline pH 7.5.

Reconstitution

Add deionized water to prepare a working stock solution of 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 the lyophilized protein at -80°C. The lyophilized protein remains stable until the expiry date when stored at -80°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 week.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

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