BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno-Řečkovice a Mokrá Hora

Date of issue: 16.10.2018

PRODUCT DATASHEET

Cystatin C Mouse E. coli

Cat. No.: RD272009025
Type: Recombinant protein
Size: 0.025 mg
Source: E. coli
Species: Mouse

Description
Total 134 AA. Mw: 15 kDa (calculated). UniProtKB acc.no. P21460. N-terminal His-tag, 14 extra AA (highlighted).

Other names
Post G-globulin, Cystatin-3, Neuroendocrine basic polypeptide, Gamma-trace, Post-gamma-globulin, CST3

Introduction to the molecule
Cystatin C is a non-glycosilated basic single-chain protein consisting of 120 amino acids with a molecular weight of 13.36 kDa and is characterized by two disulfide bonds in the carboxy-terminal region. It belongs to the cystatins superfamilly which inactivates lysosomal cysteine proteinases, e.g. cathepsin B, H,.K, L and S. Imbalance between Cystatin C and cysteine proteinases is associated with inflammation, renal failure, cancer, Alzheimer's di-sease, multiple sclerosis and hereditary Cystatin C amyloid angiopathy. Its increased level has been found in patients with autoimune diseases, with colorectal tumors and in patients on dyalisis. Serum Cystatin C seems to be better marker of glomerular filtration rate than creatinine. On the other hand, low concentration of Cystatin C presents a risk factor for secondary cardiovascular events.

Research topic
Neural tissue markers, Renal disease

Amino Acid sequence
MRGSHHHHHH GMASATPKQG PRMLGAPEEA DANEEGVRRA LDFAVSEYNK GSNDAYHSRA IQVVRARKQL VAGVNYFLDV EMGRTTCTKS QTNLTDCPFH DQPHLMRKAL CSFQIYSVPW KGTHSLTKFS CKNA

Purity
>95%

Endotoxin
< 1.0 EU/µg

Formulation:
Filtered (0.4 µm) and lyophilized in 0.5 mg/mL in 20mM Tris buffer, 50 mM NaCl, pH 7.5

Reconstituion:
Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

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

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Storage, Stability/Shelf Life
Store the lyophilized protein at –80 °C. 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.

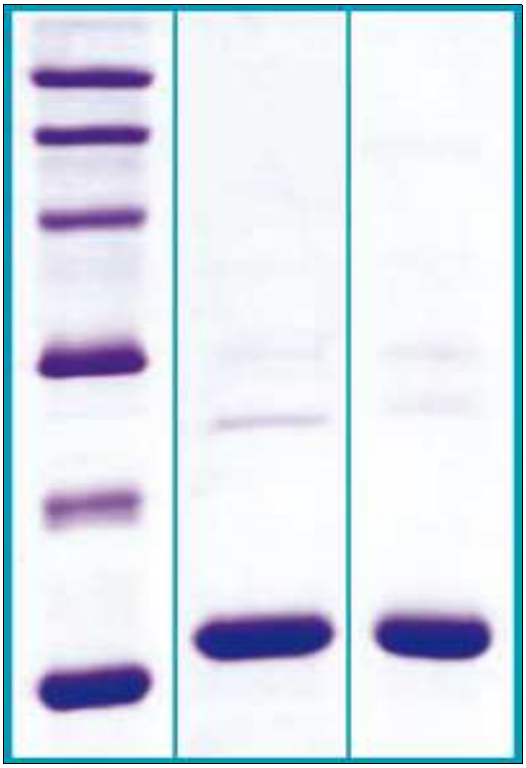
Quality control
BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL to determine quantity of endotoxin.

Applications
Western blotting

Note
This product is intended for research use only.



12% SDS-PAGE separation of Mouse Cystatin C
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

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