

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Human Cystatin C

Catalog No. Source
228-10301 Escherichia Coli.

Synonyms

Cystatin-C, Cystatin-3, Neuroendocrine basic polypeptide, Gamma-trace, Post-gamma-globulin, CST3, MGC117328.

Introduction:

Cystatins are a superfamily of cysteine proteinase inhibitors found in both plants and animals. They comprise a group of proteinase inhibitors, widely distributed in tissues and body fluids, and form tight complexes with cysteine proteases such as cathepsin B, H, L and S. Cystatin C, a secreted molecule of this family, is of interest from biochemical, medicine and evolutionary points of view. Cystatin C, with molecular weight of 13260 Da, is composed of 120 amino acids, lacks carbohydrate and has two disulfide bridges located near the carboxyl terminus. Cystatin C is increased in patients with malignant diseases, and is related to the insufficiency of renal function and appears to be a better marker than creatinine. On the other hand, low levels of cystatin C involve cause the breakdown of the elastic laminae and, subsequently, the atherosclerosis and abdominal aortic aneurysm.

Description

Cystatin-C Human Recombinant produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 129 amino acids and having a molecular mass of 14.5 kDa. The protein contains an extra His tag at N-terminus. The Cystatin-C amino acid sequence is identical to UniProtKB/Swiss-Prot entry Q6FGW9 amino acids 28–146.

The Cystatin-C is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from from 0.5mg/mL in 20mM Tris buffer and 50mM NaCl pH-7.5.

Purity

Greater than 95% as determined by SDS PAGE.



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Solubility

Add deionized water to prepare a working stock solution of approximately 0.5mg/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.

Stability

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 two weeks at 4° C.

Applications

ELISA, Western blotting.