

Catalog Number: HZ-1211-GMP

## **Data Sheet**





**Animal Component-Free** 

**Human cell expressed** 

Tag-Free

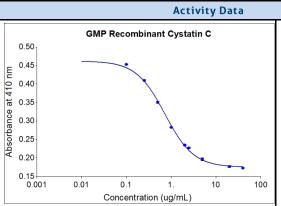
**Endotoxin Free** 

## **Product Description**

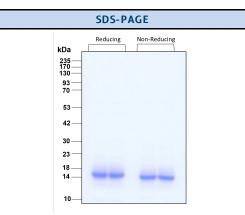
Animal-free Recombinant Human Cystatin C (Cys-C) is expressed in human 293 cells as a monomer with an apparent molecular mass of 12 to 13 kDa. Native Cys-C in human urine is found in two different forms: one with pl 9.2 and the other with pl 7.8 by elimination of small basic peptides or amino acids from the N-terminal end of protein. Cystatin C has been studied for its role in predicting newonset or deteriorating cardiovascular disease. This cytokine is produced in a serum-free, chemically defined media.

-y				
Alternative Names	ARMD11, CST3, Cystatin 3, cystatin C, Gamma trace, Post gamma globulin			
Accession Number	P01034			
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived Cystatin C protein			
Species Reactivity	human			
Adventitious Virus	Master Cell Bank tested Negative for Adventitious Viruses			

Specifications					
Test	Method	Specification			
Activity	Dose-dependent inhibition of Papain protease activity by colorimetric assay using L-BAPA as the substrate.	0.5-2.6 μg/mL			
Molecular Mass	SDS-PAGE	15 to 18 kDa reduced, 14 to 17 kDa non-reduced, monomer, non-glycosylated			
Purity	SDS-PAGE	>95%			
Endotoxin	LAL	<0.1 EU/µg			
Mycoplasma	PCR	Not Detected			



Recombinant Human GMP
Cystatin C (HZ-1211-GMP)
inhibits papain protease
activity in a dose-dependent
manner. Papain protease
activity was measured by
colorimetric assay using LBAPA as the substrate. The
EC50 was determined using
a 4-parameter non-linear
regression model. Activity
determination was
conducted in triplicate on a
validated bioassay. The EC50
values range form 0.5-2.6



Purity of GMP recombinant human Cystatin C was determined by SDS- polyacrylamide gel electrophoresis. The protein was resolved in an SDS- polyacrylamide gel in reducing and non-reducing conditions and stained using Coomassie blue.

www.ptglab.com

Document #: FR-QA118-101 Rev 0 Data Sheet Version #: 1 Proteintech Group, Inc.

5500 Pearl Street, Suite 400 Rosemont, IL 60612 t: 1-888-478-4522; f: 1-312-455-8408 Email: proteintech@ptglab.com

Preparation				
Shipping Temperature				
Formulation	Formulation 1x PBS, See Certificate of Analysis for details			
Reconstitution  Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile Gently swirl or tap vial to mix.				

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
	Avoid repeated freeze-thaw cycles.		

## Proteintech GMP Quality Policy HumanKine® GMP Proteins

Invitro recombinant protein production can be prone to variability due to various reasons ranging from quality of raw materials to inconsistency in the process. Therefore, HumanKine®, a proteintech brand's GMP proteins are produced and tested under an ISO 13485 certified quality management system in a clean room facility. Proteintech manufactures the GMP HumanKine® products according to the applicable sections in the following documents: USP Chapter 1043 (Ancillary Materials for Cell, Gene, and Tissue-Engineered Products, USP Chapter 92 (Growth Factors and Cytokines Used in Cell Therapy Manufacturing), WHO TRS, No. 822, 1992 Annex 1 (Good Manufacturing Practices for Biological Products), Ph. Eur. General Chapter 5.2.12, and EudraLex – Volume 4 – Part IV (Guidelines on GMP specific to ATMPs). Proteintech strives to achieve the utmost quality GMP raw material ensuring all applicable guidelines are taken into consideration.

The QMS is built to provide our customers with consistent and pure product delivered by documented processes, qualified personnel, validated processes, qualified equipment, qualified vendors, and a stringent final product release process. Although the final product release process is important, Proteintech performs in-process QC steps after each major manufacturing stage. Production records and facilities may be available for an inspection by approved personnel.

Our GMP policy covers all the aspects of production; from raw materials, facility, equipment, and Instruments to training and personal hygiene of staff. It also guarantees that the process is explicit, validated and well documented for transparency and traceability.

www.ptglab.com

Document #: FR-QA118-101 Rev 0 Data Sheet Version #: 1 Proteintech Group, Inc.

5500 Pearl Street, Suite 400 Rosemont, IL 60612 t: 1-888-478-4522; f: 1-312-455-8408 Email: proteintech@ptglab.com