# Recombinant Human Cystatin E/CST6 Protein (His Tag)

**Catalog Number: PKSH032326**

**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

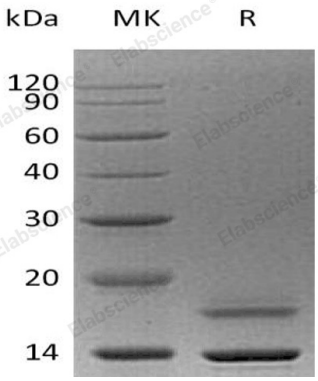
## Description

| | |
|---|---|
| **Species** | Human |
| **Source** | HEK293 Cells-derived Human Cystatin E;CST6 protein Arg29-Met 149, with an C-terminal His |
| **Calculated MW** | 14.7 kDa |
| **Observed MW** | 14&18 kDa |
| **Accession** | Q15828 |
| **Bio-activity** | Not validated for activity |

## Properties

| | |
|---|---|
| **Purity** | > 95 % as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method. |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 10% maltose, 0.1% Tween 80, pH9.0. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 95 % as determined by reducing SDS-PAGE.

## Background

Cystatin-M is a typical secretory protein. It is synthesized as a preprotein with a patent N-terminal signal sequence.It belongs to the cystatin family. The most widely accepted function of cystatins is that of protease inhibitors. Most cysteine proteases are confined within cells where optimal pH and redox conditions favor their enzymatic activity. Thu s, the majority of intracellular cysteine proteases are inactivated by oxidizing conditions outside the cells. Among the various types of intracellular cysteine proteases, cystatins seem to target preferentially endosomal/lysosomal cysteine proteases of the papain family, such as cathepsin B, cathepsin K/O2, cathepsin L, cathepsin L2/V and cathepsin S. Another important function of Cst6 seems to be in the terminal differentiation of stratified squamous epithelial cells and in the formation of cornified envelops. Cst6 is believed to be important in fine-tuning the enzymatic activities of endosomal/lysosomal cysteine proteases such as cathepsin L, cathepsin L2/V and AEP/mammalian legumain. Deregulated activity of these proteases could lead to abnormal activation of transglutaminases and disorders in cornification.


Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com