Product Name: Recombinant Human CST6 (C-6His)

Catalog #: PHH0497



Summary

Name Cystatin E/Cystatin M/CST6

Purity Greater than 95% as determined by reducing SDS-PAGE

Endotoxin level <1 EU/μg as determined by LAL test.

Construction Recombinant Human Cystatin E/Cystatin M is produced by our Mammalian

expression system and the target gene encoding Arg29-Met149 is expressed

with a 6His tag at the C-terminus.

Accession # Q15828

Host Human Cells

Species Human

Predicted Molecular Mass 14.66 KDa

Formulation Lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 10% maltose, 0.1%

Tween 80, pH9.0.

Shipping The product is shipped at ambient temperature. Upon receipt, store it

immediately at the temperature listed below.

Stability&Storage Store at \leq -70°C, stable for 6 months after receipt. Store at \leq -70°C, stable for 3

months under sterile conditions after opening. Please minimize freeze-thaw

cycles.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is

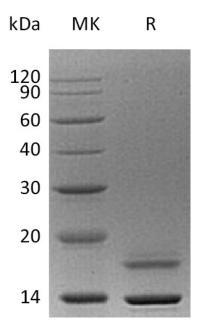
not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image

Product Name: Recombinant Human CST6 (C-6His)

Catalog #: PHH0497





Alternative Names

Cystatin-M; Cystatin-6; Cystatin-E; CST6

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. Thus, 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.

Note

For Research Use Only, Not for Diagnostic Use.