

## 32-7307: Recombinant Human Cystatin M/CST6 (C-6His)

**Gene :** CST6  
**Gene ID :** 1474  
**Uniprot ID :** Q15828

### Description

Source: Human Cells.  
MW :14.66kD.

Recombinant Human Cystatin E/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. 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 envelopes. 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, pH 5.5.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** RPQERMVGE LRDLSPDDPQVQKAAQAAVASYNMGSNSIYYFRDTHIIKAQSQLVAGIKYFLTMEMGSTDCRKT  
RVTGDHVDLTTCPAAGAQQEKLRCDFEVLVVPWQNSSQLLKHNCVQMLEHHHHHH

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.