Recombinant Human Cystatin E/CST6 Protein (His Tag)

Catalog No. PKSH032326

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

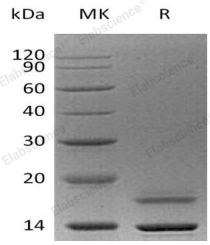
Description

Synonyms	Cystatin-M;Cystatin-6;Cystatin-E;CST6
Species	Human
Expression Host	HEK293 Cells
Sequence	Arg29-Met 149
Accession	Q15828
Calculated Molecular Weight	14.7 kDa
Observed molecular weight	14&18 kDa
Tag	C-His
Bioactivity	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℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 20mM MES, 150mM NaCl, pH 5.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
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

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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.

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