Recombinant Protein Technical Manual

Recombinant Human Cystatin E/CST6 Protein (His Tag)

RPES1761

Product Data:

Product SKU: RPES1761

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q15828

Protein Information:

Molecular Mass: 14.7 kDa

AP Molecular Mass: 14 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ 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.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Cystatin-M; Cystatin-6; Cystatin-E; CST6

Immunogen Information:

Sequence: Arg29-Met 149

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.