

Recombinant Human Cystatin-D/CST5 Protein

Catalog No.: RP01035 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	1473	P28325

Tags

C-His

Synonyms

CST5;MGC71922;CST5

Background

The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Cystatins are natural inhibitors of papain-like (family C1) and legumain-related (family C13) cysteine peptidases. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and the kininogens. As a member of type 2 cystatin, cystatin D is a single-domain protein and also has cysteine residues that form disulfide bridges. The functions of Cystatin D are largely unknown. However, Cystatin D has been shown to inhibit coronavirus replication at its physiological concentration (0.12_x005f

Basic Information

Product Information

Source	Purification
HEK293 cells	> 90% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Description

Recombinant Human Cystatin-D/CST5 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gly21-Val142) of human Cystatin D (Accession #NP_001891.2) fused with a 6xHis tag at the C-terminus.

Bio-Activity

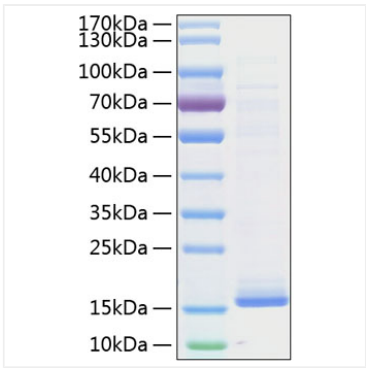
Measured by its ability to inhibit papain cleavage of a fluorogenic peptide substrate Z-FR-AM. The IC50 value is <18 nM.

Storage

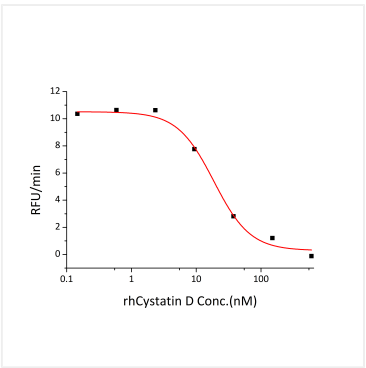
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

Validation Data



Recombinant Human Cystatin-D/CST5
Protein was determined by SDS-PAGE with
Coomassie Blue, showing a band at 15
kDa.



Recombinant Human CST6 inhibits papain
cleavage of a fluorogenic peptide
substrate Z-FR-AMC (Catalog # ES009). The
IC50 value is <18 nM.