

RP01035

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# Recombinant Human Cystatin-D/CST5 Protein

Catalog No.: RP01035 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	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

## Product Information

Source	Purification
HEK293 cells	≥ 90 % as determined 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 free-thaw cycles.

## Basic Information

### 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.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. 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

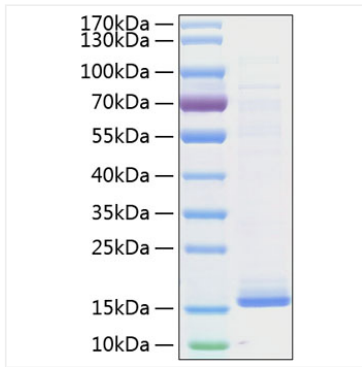


[www.abclonal.com](http://www.abclonal.com)

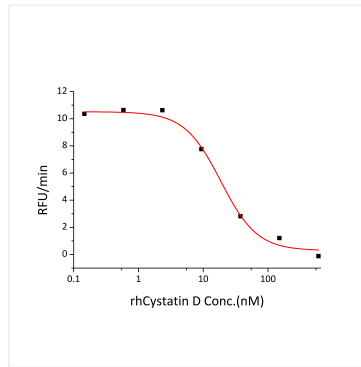
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## Validation Data

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Recombinant Human Cystatin-D/CST5 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human CST6 inhibits papain cleavage of a fluorogenic peptide substrate Z-FR-AMC (Catalog # ES009). The IC<sub>50</sub> value is <18 nM.