Catalog # CTS-H52H9



#### Synonym

CTSS,Cathepsin S

#### Source

Human Cathepsin S, His Tag(CTS-H52H9) is expressed from human 293 cells (HEK293). It contains AA Gln 17 - Ile 331 (Accession # <u>P25774-1</u>). Predicted N-terminus: Gln 17

## **Molecular Characterization**

This protein carries a polyhistidine tag at the C-terminus. This protein contains an Activation peptide(17 Q-114 I), and will be partially processed into Pro form with calculated MW of 39 kDa and mature form with calculated MW of 28 kDa under reducing (R) condition.

## Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

# Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## Formulation

Supplied as 0.2  $\mu$ m filtered solution in 12.5 mM MES, 75 mM NaCl, pH6.5 with glycerol as protectant.

Contact us for customized product form or formulation.

## Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

## Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

## **SDS-PAGE**



Human Cathepsin S, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-

# SEC-MALS



The purity of Human Cathepsin S, His Tag (Cat. No. CTS-H52H9) is more than 90% and the molecular weight of this protein is around 70-92 kDa verified by SEC-MALS. <u>Report</u>

RPKPVENvalWRK(Dnp)NH2. The specific activity is  $>1200 \text{ pmol/min/}\mu\text{g}$ , as measured under the described conditions (QC tested).





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Cathepsin S is also known as CTSS, which is a member of the peptidase C1 family. Cathepsin S is a lysosomal cysteine protease that may participate in the degradation of antigenic proteins to peptides for presentation on MHC class II molecules. Cathepsin S can function as an elastase over a broad pH range in alveolar macrophages. The catalytic activity of cathepsin S is similar to cathepsin L, but with much less activity on Z-Phe-Arg-|-NHMec, and more activity on the Z-Val-Val-Arg-|-Xaa compound.



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