

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

Cathepsin S(Gln 17 - Ile 331) P25774-1

Poly-his

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 µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Supplied as 0.2 µm 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.

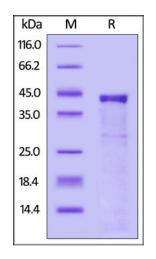
Storage

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

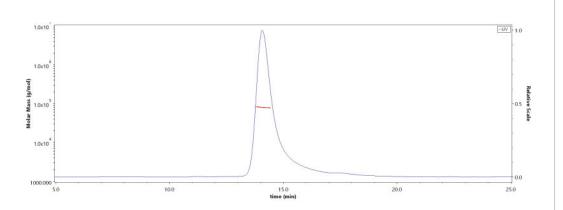


Human Cathepsin S, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVENvalWRK(Dnp)NH2. The specific activity is >1200 pmol/min/μg, as measured under the described conditions (QC tested).

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.

Report

Background



Human Cathepsin S / CTSS Protein, His Tag (active enzyme, MALS verified)

Catalog # CTS-H52H9



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.

Clinical and Translational Updates

