

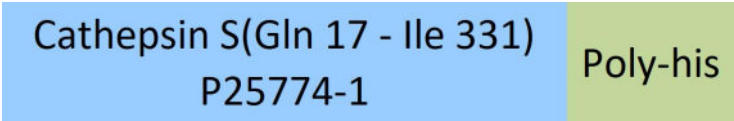
Synonym

CTSS,Cathepsin S

Source

Human Cathepsin S, His Tag (CTS-H5224) is expressed from human 293 cells (HEK293). It contains AA Gln 17 - Ile 331 (Accession # [P25774-1](#)).
Predicted N-terminus: Gln 17 (pro) & Leu 115 (mature)

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.
This protein undergoes autocatalytic cleavage to release the propeptide and mature chain. The propeptide and mature chain are associated through non-covalent interactions and with a calculated MW of 36.8 kDa and 24.9 kDa respectively. The protein migrates as 36-42 kDa (propeptide) and 26 kDa (mature) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM MES, 100 mM NaCl, pH6.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

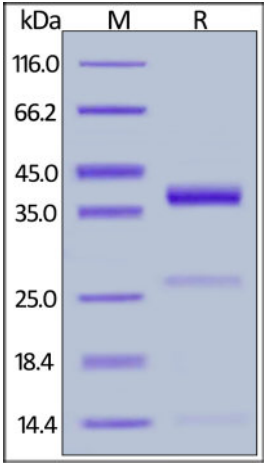
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

- This product is stable after storage at:
- -20°C to -70°C for 12 months in lyophilized state;
 - -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Cathepsin S, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

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.

References

(1) [Burkard T.R., et al., 2011, BMC Syst. Biol. 5:17-17.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.