Human Cathepsin D Protein, His Tag (active enzyme, MALS verified)

Catalog # CAD-H52H3

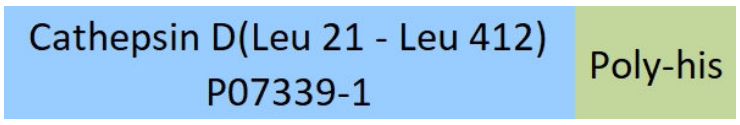
Synonym

CTSD,Cathepsin D,CPSD,CLN10

Source

Human Cathepsin D Protein, His Tag(CAD-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 21 - Leu 412 (Accession # P07339-1). Predicted N-terminus: Leu 21

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 44.5 kDa. The protein migrates as 45-50 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% 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.

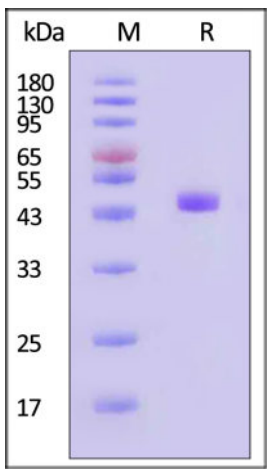
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

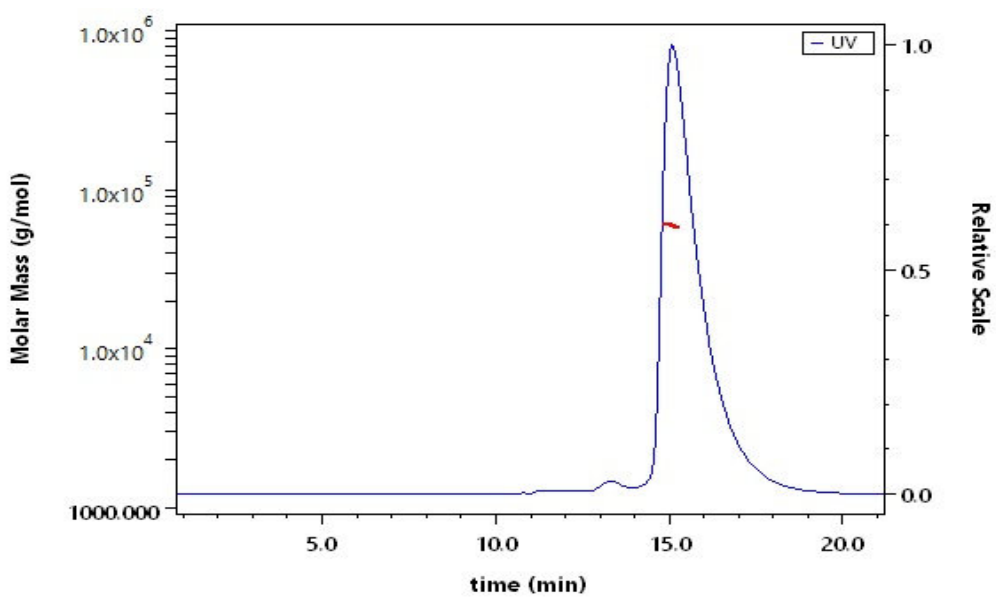
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Human Cathepsin D Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human Cathepsin D Protein, His Tag (Cat. No. CAD-H52H3) is more than 95% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.
Report

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2 . The specific activity is >350 pmol/min/μg (QC tested).

Background

This gene encodes a member of the A1 family of peptidases. The encoded preproprotein is proteolytically processed to generate multiple protein products. These products include the cathepsin D light and heavy chains, which heterodimerize to form the mature enzyme. This enzyme exhibits pepsin-like activity and plays a role in protein turnover and in the proteolytic activation of hormones and growth factors. Mutations in this gene play a causal role in neuronal ceroid lipofuscinosis-10 and may be involved in the pathogenesis of several other diseases, including breast cancer and possibly Alzheimer's disease. [provided by RefSeq, Nov 2015]