

Recombinant Human CTSD, His-tagged, C13&N15 Labeled

Cat. No. CTSD-207H **Lot. No.** (See product label)

SPECIFICATION

| | |
|-----------------------------|--|
| Product Overview | Recombinant Human CTSD MS Standard Protein, C13 and N15-labeled (CTSD / Cathepsin D, Heavy Labeled) Ser 19 - Leu 412 (Accession # NP_001900) was produced in human 293 cells (HEK293) with fully chemically defined cell culture medium to obtain >99% incorpor |
| Species | Human |
| Source | HEK293 |
| ProteinLength | 19-412 a.a. |
| Description | Cathepsin D is also known as CTSD, CPSD, which belongs to the peptidase A1 family. Cathepsin D can be cleaved into the following 2 chains: cathepsin D light chain and cathepsin D heavy chain, which is expressed in the aorta extracellular space (at protein level). The catalytic activity of Cathepsin D is specificity similar to, but narrower than, that of pepsin A. Cathepsin D does not cleave the 4-Gln- -His-5 bond in B chain of insulin. Cathepsin D involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease. |
| Predicted N Terminal | Ser 19 |
| Form | Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose are added as protectants before lyophilization. |
| Molecular Mass | CTSD / Cathepsin D, Heavy Labeled is fused with a polyhistidine tag at the C- |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

terminus, and has a calculated MW of 43.6 kDa. The predicted N-terminus is Ser 19. DTT-reduced Protein migrates as 45-55 kDa in SDS-PAGE due to glycosylation. CTSD / Cathepsin D,

Endotoxin

Less than 1.0 EU per µg of the CTSD / Cathepsin D, Heavy Labeled by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Applications

MS Standard Protein

Storage

Avoid repeated freeze-thaw cycles. No activity loss was observed after storage at: In lyophilized state for 1 year (4oC); After reconstitution under sterile conditions for 3 months (-70oC).

GENE INFORMATION

Gene Name

CTSD cathepsin D [Homo sapiens]

Official Symbol

CTSD

Synonyms

CTSD; cathepsin D; cathepsin D (lysosomal aspartyl protease) , CPSD; ceroid lipofuscinosis; neuronal 10; CLN10; lysosomal aspartyl protease; lysosomal aspartyl peptidase; ceroid-lipofuscinosis, neuronal 10; CPSD; MGC2311;

Gene ID

1509

mRNA Refseq

NM_001909

Protein Refseq

NP_001900

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|----------------------------|---|
| MIM | 116840 |
| UniProt ID | P07339 |
| Chromosome Location | 11p15.5 |
| Pathway | Ceramide signaling pathway, organism-specific biosystem; Direct p53 effectors, organism-specific biosystem; LKB1 signaling events, organism-specific biosystem; Lysosome, organism-specific biosystem; Lysosome, conserved biosystem; Tuberculosis, organism-specific biosystem; Tuberculosis, conserved biosystem; |
| Function | aspartic-type endopeptidase activity; peptidase activity; |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA