

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-

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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

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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;

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