

## Product datasheet for PH323541

### Cathepsin L (CTSL) (NM\_145918) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CTSL1 MS Standard C13 and N15-labeled recombinant protein (NP_666023)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC223541
Predicted MW:	37.5 kDa
Protein Sequence:	>RC223541 protein sequence Red=Cloning site Green=Tags(s)

MNPTLILAAFLGIASATLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRRAVWEKNVKMIELHNQEYREGK  
HSFTMAMNAFGDMTSEEFRQVMNGFQNRKPRKGVFQEPLFYEAAPRSVDWREKGYVTPVKNQGCQSCWA  
FSATGALEGQMFRTGRLISLSEQLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEES  
CKYNPKYSVANDTGFVDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLV  
VGYGFESESDNNKYWLKNSWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_666023</a></u>
RefSeq Size:	1587
RefSeq ORF:	999
Synonyms:	CATL; CTSL1; MEP
Locus ID:	1514



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UniProt ID: [P07711](#), [A0A024R276](#)

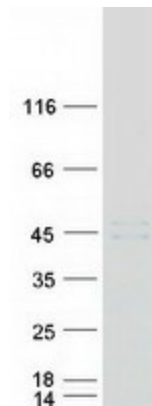
Cytogenetics: 9q21.33

**Summary:** The protein encoded by this gene is a lysosomal cysteine proteinase that plays a major role in intracellular protein catabolism. Its substrates include collagen and elastin, as well as alpha-1 protease inhibitor, a major controlling element of neutrophil elastase activity. The encoded protein has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. This protein, which is a member of the peptidase C1 family, is a dimer composed of disulfide-linked heavy and light chains, both produced from a single protein precursor. Additionally, this protein cleaves the S1 subunit of the SARS-CoV-2 spike protein, which is necessary for entry of the virus into the cell. [provided by RefSeq, Aug 2020]

**Protein Families:** Druggable Genome, Protease

**Protein Pathways:** Antigen processing and presentation, Lysosome

### Product images:



Coomassie blue staining of purified CTSL protein (Cat# [TP323541]). The protein was produced from HEK293T cells transfected with CTSL cDNA clone (Cat# [RC223541]) using MegaTran 2.0 (Cat# [TT210002]).