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Product datasheet for PH303143

Cathepsin L (CTSL) (NM_001912) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CTSL1 MS Standard C13 and N15-labeled recombinant protein (NP_001903)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC203143
Predicted MW:	37.5 kDa
Protein Sequence:	>RC203143 protein sequence Red=Cloning site Green=Tags(s) MNPTLILAAFCLGIASATLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRAVWEKNVKMIELHNQEYREGK HSFTMAMNAFGDMTSEEFRQVMNGFQNRKPRKGKVFQEPLFYEAPRSVDWREKGYVTPVKNQGQCGSCWA FSATGALEGQMFRKTGRLISLSEQNLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEES CKYNPKYSVANDTGFVDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLV VGYGFESTESDNNKYWLVKNSWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV 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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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:	NP_001903
RefSeq Size:	1730
RefSeq ORF:	999
Synonyms:	CATL; CTSL1; MEP
Locus ID:	1514

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UniProt ID: P07711, A0A024R276

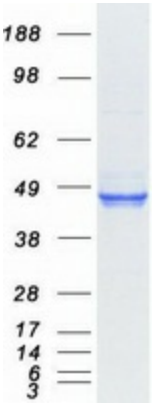
Cytogenetics: 9q21.33

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# [TP303143]). The protein was produced from HEK293T cells transfected with CTSL cDNA clone (Cat# [RC203143]) using MegaTran 2.0 (Cat# [TT210002]).