

Recombinant Human CTSL protein, His-tagged

Cat. No. CTSL-137H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CTSL(18-333 aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	18-333 a.a.
Description	CTSL, also known as cathepsin L1 isoform 1, 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. Multiple alternatively spliced transcript variants have been found for this gene.
Form	Liquid. In 20mM Tris-HCl(pH8.0) containing 10% glycerol
Molecular Mass	38.3kDa (339 aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSTLTFDHS LEAQWTKWKA MHNRLYGMNE EGWRRVWEEK NMKMIELHNQ EYREGKHSFT MAMNAFGDMT

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SEEFRQVMNG FQNRKPRKGK VFQEPLFYEA PRSVDWREKG YVTPVKNQGG
 CGSCWAFSAT GALEGQMFRK TGRLLSLSEQ NLVDCSGPQG
 NEGCNGGLMD YAFQYVQDNG GLDSEESYPY EATEESCKYN PKYSVANDTG
 FVDIPKQEKA LMKAVATVGP ISVAIDAGHE SFLFYKEGIY
 FEPDCSSEDH DHGVLVVGYG FESTESDNNK YWLVKNSWGE EWGMGGYVKM
 AKDRRNHCGI ASAASYPTV

Endotoxin < 1.0 EU per 1 microgram of protein (determined by LAL method)

Purity > 85% by SDS - PAGE

Applications SDS-PAGE

Storage Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

Concentration 1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name CTSL cathepsin L [Homo sapiens]

Official Symbol CTSL

Synonyms MEP; CATL; CTSL1; cathepsin L1; major excreted protein

Gene ID 1514

mRNA Refseq NM_001257972

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Protein Refseq	NP_001244901
MIM	116880
UniProt ID	P07711
Chromosome Location	9q21.33
Pathway	Adaptive Immune System, organism-specific biosystem; Collagen degradation, organism-specific biosystem; Lysosome, conserved biosystem
Function	collagen binding; cysteine-type endopeptidase activity; proteoglycan binding

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