

Recombinant human Cathepsin L protein

Catalog Number: ATGP2989

PRODUCT INFORMATION

Expression system

E.coli

Domain

18-333aa

UniProt No.

P07711

NCBI Accession No.

NP_001244901.1

Alternative Names

Procathepsin L, Cathepsin L1, Major excreted protein, MEP, CTSL, CTSL1

PRODUCT SPECIFICATION

Molecular Weight

38.3 kDa (339aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE, Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

CTSL, also known as Cathepsin L1 isoform 1 preproprotein, 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

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alternatively spliced transcript variants have been found for this gene. Recombinant CTSL, fused to His-tag at N-terminus, was expressed in *E. coli*.

Amino acid Sequence

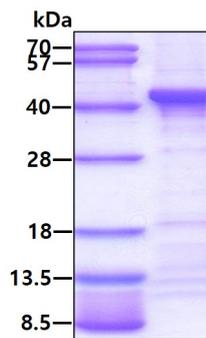
<MGSSHHHHHH SSGLVPRGSH MGS>TLTFDHS LEAQWTKWKA MHNRLYGMNE EGWRRRAVWEK NMKMIELHNQ
EYREGKHSFT MAMNAFGDMT SEEFRQVMNG FQNRKPRKGK VFQEPLFYEA PRSVDWREKG YVTPVKNQGQ
CGSCWAFSAT GALEGQMRK TGRILSLSEQ NLVDCSGPQG NEGCNGGLMD YAFQYVQDNG GLDSEESYPY EATEESCKYN
PKYSVANDTG FVDIPKQEKA LMKAVATVGP ISVAIDAGHE SFLFYKEGIY FEPDCSSEDM DHGVLVVGYG FESTESDNNK
YWLVKNSWGE EWGMGGYVKM AKDRRNHCGI ASAASYPTV

General References

Bauer Y, Hess P, et al. (2011). *Hypertension*. 57(4):795-801.
Wei DH, Jia XY, et al. (2013). *Int J Mol Med*. 31(2):400-6.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.