

CTSL, 18-333aa, Human, His tag, E.coli

Cat.NO.: TP01780

3th Edition

Synonyms:Cathepsin L1 isoform 1, CATL, CTSL1, MEP

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

Form:Liquid. In 20mM Tris-HCl(pH 8.0) containing 10% glycerol.

Molecular Weight:38.3kDa (339aa)

Sequences:

MGSSHHHHHHSSGLVPRGSHMGSTLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRRAVWEKNMKMIELHNQEY
REGKHSFTMAMNAFGDMTSEEFRQVMNGFQNRKPRKGKVFQEPLFYEAPRSVDWREKGYVTPVKNQGGQCGSC
WAFSATGALEGQMFRKTGRLISLSEQNLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEESCK
YNPKYSVANDTGFVDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLVVGYGFFESTE
SDNNKYWLKNSWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV

Purity:> 95% by HPLC

Concentration:1mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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