Datasheet for ABIN7489034

Cathepsin L Protein (His tag)

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Overview

Quantity:	100 µg
Target:	Cathepsin L (CTSL1)
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Cathepsin L protein is labelled with His tag.

Product Details

Purpose:	Mouse Cathepsin L / CTSL1 Protein, His Tag (active enzyme, MALS verified)
Sequence:	Thr 18 - Asn 334
Characteristics:	Mouse Cathepsin L Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Thr 18 - Asn 334 (Accession # P06797-1).
Purity:	90 %
Endotoxin Level:	1.0 EU per µg
Grade:	MALS verified

Target Details

Target:	Cathepsin L (CTSL1)
Alternative Name:	Cathepsin L (CTSL1 Products)

Target Details

Background:	Cathepsin L (CTSL1) is also known as major excreted protein (MEP), is a member of the peptidase C1 family, is a dimer composed of disulfide-linked heavy and light chains linked by disulfide bonds. CTSL1 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. MEP has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. CTSL1 is important for the overall degradation of proteins in lysosomes. The specificity of MEP is close to that of papain. As compared to cathepsin B, cathepsin L exhibits higher activity toward protein substrates, but has little activity on Z - Arg - Arg - NHMec, and no peptidyl - dipeptidase activity. Human Cathepsin L activity is greatest under mildly acidic conditions, from pH 4.5 - 6.5. The stability of the enzyme decreases at higher pH values.
Molecular Weight:	37.7 kDa
Pathways:	Activation of Innate immune Response, Toll-Like Receptors Cascades

Application Details

Comment:	This protein carries a polyhistidine tag at the C-terminus. (10xHis) This protein contains an Activation peptide, and will be partially processed into Pro form with calculated MW of 35.8 kDa and proteolytic cleavage generate the single-chain activate form with calculated MW of 24.1 kDa and cleavaged activation peptide with calculated MW of 5 kDa under reducing (R) condition. The protein migrates as 40 kDa, 30 kDa and 10 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	25 mM Tris,150 mM NaCl, pH 7.0
Storage:	-80 °C
Storage Comment:	-70°C