Datasheet for ABIN7194686

Cathepsin L2 Protein (CTSL2) (His tag)

Go to Product page

Overview

Quantity:	50 µg
Target:	Cathepsin L2 (CTSL2)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Cathepsin L2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Cathepsin L2/CTSL2 Protein (His Tag)(Active)
Sequence:	Met 1-Val 334
Characteristics:	A DNA sequence encoding the full length of human cathepsin L2 (NP_001324.2) (Met 1-Val 334) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave the fluorogenic peptide substrate Z-LR-AMC, (R&D Systems, Catalog # ES008). The specific activity is >1000 pmoles/min/µg.

Target Details

Target:	Cathepsin L2 (CTSL2)

Target Details

Alternative Name:	Cathepsin L2/CTSL2 (CTSL2 Products)
Background:	Background: Cathepsin V (CTSV), also known as Cathepsin L2, CTSL2, and CATL2, is a member of the peptidase C1 family. It is predominantly expressed in the thymus and testis. Cathepsin V is also expressed in corneal epithelium, and to a lesser extent in conjuctival epithelium and skin. It is a lysosomal cysteine proteinase that may play an important role in corneal physiology. It has about 75 % protein sequence identity to murine cathepsin L. The fold of this enzyme is similar to the fold adopted by other members of the papain superfamily of cysteine proteases. Cathepsin V has been recently described as highly homologous to Cathepsin L and exclusively expressed in human thymus and testis. Cathepsin V is the dominant cysteine protease in cortical human thymic epithelial cells, while Cathepsin L and Cathepsin S seem to be restricted to dendritic and macrophage-like cells. Active Cathepsin V in thymic lysosomal preparations was demonstrated by active-site labeling. Recombinant Cathepsin V was capable of converting Ii into CLIP efficiently, suggesting that it is the protease that controls the generation of alphabeta-CLIP complexes in the human thymus. Cathepsin V is the third elastolytic cysteine protease which exhibits the most potent elastase activity yet described among human proteases and that it is present in atherosclerotic plaque specimens. Cathepsin L2 may play a specialized role in the thymus and testis. Expression analysis of cathepsin L2 in human tumors revealed a widespread expression in colorectal and breast carcinomas but not in normal colon or mammary gland or in peritumoral tissues. Cathepsin L2 was also expressed by colorectal and breast cancer cell lines as well as by some tumors of diverse origin, including ovarian and renal carcinomas. Synonym: Cathepsin L2, Cathepsin U, Cathepsin V, CTSL2, CATL2, CTSU, CTSV
Molecular Weight:	37.1 kDa
NCBI Accession:	NP_001324
Pathways:	Toll-Like Receptors Cascades

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4

Handling

Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.