

Datasheet for ABIN7194694

Cathepsin Z Protein (CTSZ) (His tag)[Go to Product page](#)**1** Image

Overview

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

Product Details

Purpose:	Recombinant Mouse Cathepsin Z Protein (His Tag)(Active)
Sequence:	Met 1-Val 306
Characteristics:	A DNA sequence encoding the mouse CTSZ (NP_071720.1) precursor (Met 1-Val 306) was expressed with a polyhistidine tag at the C-terminus.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPPGFSAFK(Dnp)-OH (R&D Systems, Catalog # ES005). The specific activity is >1,200 pmoles/min/µg.

Target Details

Target:	Cathepsin Z (CTSZ)
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Target Details

Alternative Name:	Cathepsin Z (CTSZ Products)
Background:	<p>Background: Cathepsin Z (CTSZ), also known as Cathepsin X or CATX, belongs to the C1 family of lysosomal cysteine proteases. Its gene structure and activity properties show several unique features that distinguish it clearly from other human cysteine proteases. It has a very short pro-region that shows no similarity to those of other cathepsins and a three-residue insertion motif that forms a characteristic 'mini loop'. Cathepsin Z exhibits mono- and di-peptidase activity at its C-terminus, and in contrast to cathepsin B, it does not act as an endopeptidase. It is restricted to the cells of the immune system, predominantly monocytes, macrophages and dendritic cells. Cathepsin Z is widely expressed in human tissues, suggesting that this enzyme could be involved in the normal intracellular protein degradation taking place in all cell types. It is capable to cleave regulatory motifs at C-terminus affecting the function of targeted molecules. Cathepsin X may regulate also the maturation of dendritic cells, a process, which is crucial in the initiation of adaptive immunity. Furthermore, higher levels of Cathepsin Z are also found in tumour and immune cells of prostate and gastric carcinomas and in macrophages of gastric mucosa, especially after infection by <i>Helicobacter pylori</i>. Cathepsin Z is also ubiquitously distributed in cancer cell lines and in primary tumors from different sources, suggesting that this enzyme may participate in tumor progression.</p> <p>Synonym: AI787083;AU019819;CTSX;D2Wsu143e</p>
Molecular Weight:	33.2 kDa
NCBI Accession:	NP_071720
Pathways:	Peptide Hormone Metabolism , Regulation of Systemic Arterial Blood Pressure by Hormones

Application Details

Restrictions:	For Research Use only
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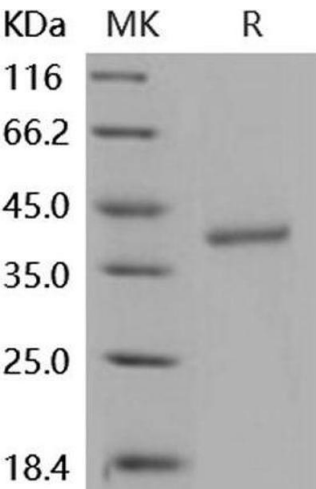
Handling

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

Handling

samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.