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Datasheet for ABIN7194692

**Cathepsin Z Protein (CTSZ) (His tag)**

## Overview

Quantity:	50 µg
Target:	Cathepsin Z (CTSZ)
Origin:	Human
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 Human Cathepsin Z Protein (His Tag)(Active)
Sequence:	Met 1-Val 303
Characteristics:	A DNA sequence encoding the human CTSZ (Q9UBR2) (Met 1-Val 303) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 97 % as determined by reducing 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 >800 pmoles/min/µg.

## Target Details

Target:	Cathepsin Z (CTSZ)
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## Target Details

Alternative Name:	Cathepsin Z ( <a href="#">CTSZ Products</a> )
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: Cathepsin Z; Cathepsin P; Cathepsin X; CTSZ</p>
Molecular Weight:	33 kDa
UniProt:	<a href="#">Q9UBR2</a>
Pathways:	<a href="#">Peptide Hormone Metabolism</a> , <a href="#">Regulation of Systemic Arterial Blood Pressure by Hormones</a>

## 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
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.