Datasheet for ABIN7194684

Cathepsin L Protein (AA 1-334) (His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	Cathepsin L (CTSL1)
Protein Characteristics:	AA 1-334
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cathepsin L protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse Cathepsin L/CTSL Protein (aa 1-334, His Tag)
Sequence:	Met 1-Asn 334
Characteristics:	A DNA sequence encoding the mouse CTSL (P06797) (Met 1-Asn 334) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.

Target Details

Target:	Cathepsin L (CTSL1)
Alternative Name:	Cathepsin L/CTSL (CTSL1 Products)
Background:	Background: Cathepsin L is a lysosomal cysteine protease that plays a major role in intracellular

Target Details

	protein catabolism, and is potent in degrading collagen, laminin, elastin, as well as alpha-1 protease inhibitor and other structural proteins of basement membranes. It is secreted by liver flukes at all stages of their development in the mammalian host, are believed to play important roles in facilitating parasite migration (tissue degradation), feeding and immuno-evasion. Like many proteases, Cathepsin L is synthesized as an inactive preproenzyme, and cleavage of the 96-residue proregion is necessary to generate the fully active 221-residue mature enzyme. Studies have demonstrated that cleavage of the proregion occur autocatalytically under acidic conditions. The enzyme takes part in nutrient acquisition by catabolizing host proteins to absorbable peptides, facilitates the migration of the parasite through the host intestine and liver by cleaving interstitial matrix proteins such as fibronectin, laminin and native collagen and is implicated in the inactivation of host immune defenses by cleaving immunoglobulins. Recently, Cathepsin L has been shown to suppress Th1 immune response in infected laboratory animals making them susceptible to concurrent bacterial infections. Cathepsin L is synthesized in large amounts and secreted by many malignantly transformed cells, and induced by growth factors and tumor promoters. In addition to its role in protein degradation, evidence has accumulated for the participation of Cathepsin L in various physiological and pathological processes, such as tumor invasion and metastasis, bone resorption, spermatogenesis, and arthritis. Accordingly, Cathepsin L may prove useful as a diagnostic or prognostic marker of human tumor malignancy. Synonym: Cathepsin L1, Major excreted protein, p39 cysteine proteinase, Ctsl1,1190035F06Rik
Molecular Weight:	37.3 kDa
UniProt:	P06797
Pathways:	Activation of Innate immune Response, Toll-Like Receptors Cascades

Application Details

Restrictions:	For Research Use only

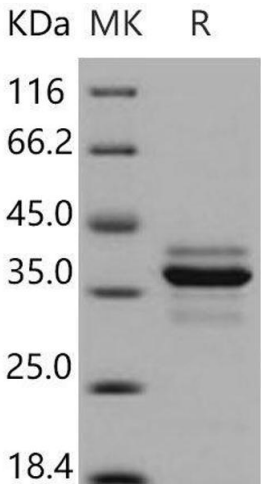
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 20 mM Tris, 150 mM NaCl, pH 7.5
Storage:	4 °C,-20 °C,-80 °C

Handling

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.

Images



Western Blotting

Image 1.