Datasheet for ABIN7194672

CTSC Protein (His tag)

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Overview

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

Product Details

Purpose:	Recombinant Human Cathepsin C/CTSC/DPPI Protein (His Tag)(Active)
Sequence:	Met 1-Leu 463
Characteristics:	A DNA sequence encoding the pro form of human cathepsin C (NP_001805.3) (Met 1-Leu 463) was expressed with a polyhistidine tag at the C-terminus.
Purity:	> 92 % 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, Gly-Arg-7-amido-4-methylcoumarin (GRAMC). The specific activity is >200 pmoles/min/µg.(Activation description: The proenzyme needs to be activated by Cathepsin L for an activated form)

Target Details

Target:	CTSC

Target Details

Alternative Name:	Cathepsin C/CTSC/DPPI (CTSC Products)
Background:	Background: Cathepsins are proteases found in many types of cells conserved in all animals, which have a vital role in mammalian cellular turnover such as bone resorption. The lysosomal cysteine protease Cathepsin C (CTSC), also known as dipeptidyl peptidase I (DPPI/DPP1), activates a number of granule-associated serine proteases with pro-inflammatory and immune functions by removal of their inhibitory N-terminal dipeptides. This lysosomal exo-cysteine protease belonging to the peptidase C1 family. Active cathepsin C is found in lysosomes as a 200- kDa multimeric enzyme. Subunits constituting this assembly all arise from the proteolytic cleavage of a single precursor giving rise to three peptides: the propeptide, the alpha- and the beta-chains. It is a central coordinator for activation of many serine proteases in immune/inflammatory cells. Defects in the Cathepsin C have been shown to be a cause of Papillon-Lefevre disease, an autosomal recessive disorder characterized by palmoplantar keratosis and periodontitis. Cathepsin C plays a key role in the activation of several degradative enzymes linked to tissue destruction in inflammatory diseases. Thus, it is a therapeutic target for the treatment of a number of inflammatory and autoimmune diseases. Synonym: CPPI,DPP-I,DPP1,DPPI,HMS,JP,JPD,PALS,PDON1,PLS
Molecular Weight:	51 kDa
NCBI Accession:	NP_001805

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.