Recombinant mouse Cathepsin C/DPPI protein

Catalog Number: ATGP4093

PRODUCT INFORMATION

Expression system
HEK293

Domain
25-462aa

UniProt No.
P97821

NCBI Accession No.
NP_034112.3

Alternative Names
Cathepsin C, AI047818, CatC, DP, DPP1, DPPI, Cathepsin J, Dipeptidyl peptidase isoform 1, Dipeptidyl peptidase 1, Dipeptidyl transferase, CTSC

PRODUCT SPECIFICATION

Molecular Weight
50.5kDa (444aa)

Concentration
0.5mg/ml (determined by Absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 50,000 pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1pmole of Gly-Arg-AMC per minute at pH 6.0 at 37C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

Recombinant mouse Cathepsin C/DPPI protein

Catalog Number: ATGP4093

BACKGROUND

Description

Cathepsin C/DPPI, also known as dipeptidyl peptidase I , is a lysosomal exo-cysteine protease belonging to the peptidase C1 protein family, a subgroup of the cysteine cathepsins. It catalyses excision of dipeptides from the N-terminus of protein and peptide substrates, except if the amino group of the N-terminus is blocked. Also, It appears to be 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. Also, It plays a key role in the activation of several degradative enzymes linked to tissue destruction in inflammatory diseases. Recombinant mouse Cathepsin C, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

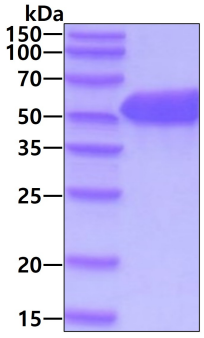
DTPANCTYPD LLGTWVFQVG PRSSRSDINC SVMEATEEKV VVHLKKLDTA YDELGNSGHF TLIYNQGFEI VLNDYKWFAF FKYEVRGHTA ISYCHETMTG WVHDVLGRNW ACFVGKKVES HIEKVNMNAA HLGGLQERYS ERLYTHNHNF VKAINTVQKS WTATAYKEYE KMSLRDLIRR SGHSQRIPRP KPAPMTDEIQ QQILNLPESW DWRNVQGVNY VSPVRNQESC GSCYSFASMG MLEARIRILT NNSQTPILSP QEVVSCSPYA QGCDGGFPYL IAGKYAQDFG VVEESCFPYT AKDSPCKPRE NCLRYYSSDY YYVGGFYGGC NEALMKLELV KHGPMAVAFE VHDDFLHYHS GIYHHTGLSD PFNPFELTNH AVLLVGYGRD PVTGIEYWII KNSWGSNWGE SGYFRIRRGT DECAIESIAV AAIPIPKL<HH HHHH>

General References

Dahl SW., et al, (2001) Biochemistry. 40:1671-1678.
Turk D., et al, (2001) The EMBO Journal. 20:6570-6582.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain