

Recombinant human Cathepsin Z protein

Catalog Number: ATGP3848

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

24-303aa

UniProt No.

Q9UBR2

NCBI Accession No.

NP_001327

Alternative Names

Carboxypeptidase LB, Cathepsin B2, Cathepsin IV, Cathepsin P, Cathepsin X, Cathepsin Y, Cathepsin Z, Cathepsin Z preproprotein, Cathepsin Z1, CatX, CTSP, CTSX, CTSZ, Cysteine-type carboxypeptidase, Lysosomal carboxypeptidase B

PRODUCT SPECIFICATION

Molecular Weight

32.5 kDa (288aa)

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 > 1,400pmol/min/ug in which one unit will convert 1.0pmole of Mca-PLGL-Dpa-AR-NH2 to MCA- Pro-Leu-OH per minute at pH 3.5 at 25C.

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 human Cathepsin Z protein

Catalog Number: ATGP3848

BACKGROUND

Description

Cathepsin Z, also known Cathepsin X and Cathepsin P, is a member of the C1 family of lysosomal cysteine proteases. It exhibits carboxy-monopeptidase and carboxy-dipeptidase activity. This protein regulates maturation of dendritic cells and plays important role in the initiation of adaptive immunity. It is also involved in tumor and immune cells as higher expression is found in tumour and immune cells of prostate and gastric carcinomas and in macrophages of gastric mucosa. Recombinant human Cathepsin Z protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

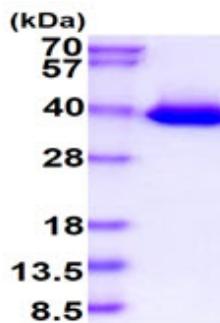
GLYFRRGQTC YRPLRGDGLA PLGRSTYPRP HEYLSPADLP KSWDWRNVDG VNYASITRNQ HIPQYCGSCW AHASTSAMAD
RINIKRKGAW PSTLLSVQNV IDCNAGSCE GGNDLSVWDY AHQHGPDET CNNYQAKDQE CDKFNQCGTC NEFKECHAIR
NYTLWRVGDY GSLSGREKMM AEIYANGPIS CGIMATERLA NYTGGIYAEY QDTTYINHVV SVAGWGISDG TEYWIVRNSW
GEPWGERGWL RIVTSTYKDG KGARYNLAIE EHCTFGDPIV LEHHHHHH

General References

Akkari L., et al, (2014) Genes Dev. 28:2134-2150.
Allan ERO., et al, (2017) J Neuroinflammation. 14:103.

DATA

SDS-PAGE

15% SDS-PAGE (3 μ g)

3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.