PRODUCT INFORMATION

Expression system Baculovirus

Domain 18-339aa

UniProt No. P10605

NCBI Accession No. NP_031824

Alternative Names Cathepsin B, Ctsb, CB, Cathepsin B1, CatB

PRODUCT SPECIFICATION

Molecular Weight 36.4 kDa (330aa)

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

Formulation

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

Purity

> 90% by SDS-PAGE

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

Biological Activity

Specific activity is > 2,000pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1pmole of Z-Arg-Arg-AMC to Z-Arg-Arg and 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.

BACKGROUND



Description

CTSB, also known as cathepsin B preproprotein, is a papain-family cysteine protease that is normally located in lysosomes. It has the ability to degrade several extracellular matrix components at both neutral and acidic pH and has been implicated in the progression of several human and rodent tumors progression and arthritis. Recombinant mouse CTSB, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

HDKPSFHPLS DDLINYINKQ NTTWQAGRNF YNVDISYLKK LCGTVLGGPK LPGRVAFGED IDLPETFDAR EQWSNCPTIG QIRDQGSCGS CWAFGAVEAI SDRTCIHTNG RVNVEVSAED LLTCCGIQCG DGCNGGYPSG AWSFWTKKGL VSGGVYNSHV GCLPYTIPPC EHHVNGSRPP CTGEGDTPRC NKSCEAGYSP SYKEDKHFGY TSYSVSNSVK EIMAEIYKNG PVEGAFTVFS DFLTYKSGVY KHEAGDMMGG HAIRILGWGV ENGVPYWLAA NSWNLDWGDN GFFKILRGEN HCGIESEIVA GIPRTDQYWG RFLEHHHHHH

General References

Podgorski I., et al. (2003) Biochem Soc Symp. 70:263-276. Roshy S., et al. (2003) Cancer Metastasis Rev. 22:271-286.





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

15% SDS-PAGE (3ug)