PRODUCT INFORMATION

Expression system Baculovirus

Domain 21-410aa

UniProt No. P18242

NCBI Accession No. NP_034113

Alternative Names Cathepsin D, Ctsd, CatD, CD

PRODUCT SPECIFICATION

Molecular Weight 44 kDa (398aa)

Concentration 0.25mg/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 > 1,000pmol/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 Enzyme Activity,SDS-PAGE

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

Ctsd, also known as cathepsin D, is peptidase belonging to the family of aspartic peptidases. It is intracellular catabolism in lysosomal compartments, other physiological effect include hormone and antigen processing. It plays an important role in alpha-synuclein degradation, and neuronal survival. It has also been shown to mediate apoptosis induced by various stimuli and p53-dependent tumor suppression. Recombinant mouse Ctsd, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

IIRIPLRKFT SIRRTMTEVG GSVEDLILKG PITKYSMQSS PKTTEPVSEL LKNYLDAQYY GDIGIGTPPQ CFTVVFDTGS SNLWVPSIHC KILDIACWVH HKYNSDKSST YVKNGTSFDI HYGSGSLSGY LSQDTVSVPC KSDQSKARGI KVEKQIFGEA TKQPGIVFVA AKFDGILGMG YPHISVNNVL PVFDNLMQQK LVDKNIFSFY LNRDPEGQPG GELMLGGTDS KYYHGELSYL NVTRKAYWQV HMDQLEVGNE LTLCKGGCEA IVDTGTSLLV GPVEEVKELQ KAIGAVPLIQ GEYMIPCEKV SSLPTVYLKL GGKNYELHPD KYILKVSQGG KTICLSGFMG MDIPPPSGPL WILGDVFIGS YYTVFDRDNN RVGFANAVVL LEHHHHHH

General References

Crabtree D., et al. (2013) Neurosci Lett. 538:3-8. Tsukuba T., et al. (2000) Mol Cells. 10:601-611.



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

15% SDS-PAGE (3ug)

