PRODUCT INFORMATION

Expression system Baculovirus

Domain 24-340aa

UniProt No. 070370

NCBI Accession No. NP_067256

Alternative Names Cathepsin S isoform 2, Ctss, Cathepsin S, Cats

PRODUCT SPECIFICATION

Molecular Weight 36.9 kDa (325aa)

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)

Tag His-Tag

Application 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

Ctss, as known as cathepsin S isoform 2, is a lysosomal cysteine protease of the papain family. This protein plays a major role in the processing of the MHC class II-associated invariant chain. It has been implicated in the pathogenensis of several diseases such as Alzheimer s disease and degenerative disorders associated with the cells of the mononuclear phagocytic system. Also, it is less abundant in tissues than Cathepsins B, L and H. The



highest levels of this protein have been found in lymph nodes, spleen and phagocytic cells. Recombinant mouse Ctss, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

EQLQRDP TLDYHWDLWK KTHEKEYKDK NEEEVRRLIW EKNLKFIMIH NLEYSMGMHT YQVGMNDMGD MTNEEISCRM GALRISRQSP KTVTFRSYSN RTLPDTVDWR EKGCVTEVKY QGSCGACWAF SAVGALEGQL KLKTGKLISL SAQNLVDCSN EEKYGNKGCG GGYMTEAFQY IIDNGGIEAD ASYPYKAMDE KCHYNSKNRA ATCSRYIQLP FGDEDALKEA VATKGPVSVG IDASHSSFFF YKSGVYDDPS CTGNVNHGVL VVGYGTLDGK DYWLVKNSWG LNFGDQGYIR MARNNKNHCG IASYCSYPEI <LEHHHHHH>

General References

Zhao P., et al. (2014) J. Biol. Chem. 289:27215-27234. Lafarge JC., et al. (2014) Diabetologia. 57:1674-1683.

DATA

SDS-PAGE



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

