Creative Enzymes®

Native Human Cathepsin S

Cat. No. NATE-0178

Lot. No. (See product label)

Introduction

Description	Cathepsin S is a lysosomal cysteine protease found primarily in the spleen and in lung macrophages. Its level is elevated in the brain tissue of those with Alzheimer's disease and Down syndrome. Cathepsin S may function in the processing of amyloid precursor protein to amyloid beta peptides.
Applications	Cathepsin S from human spleen has been used in a study to assess the sequence identification, tissue distribution and polymorphism of the porcine cathepsin D (CTSD) Gene. Cathepsin S from human spleen has also been used in a study to investigate a new promising camptothecin analogue-polysaccharide conjugate.
Synonyms	CTSS; cathepsin S; EC 3.4.22.27; FLJ50259; MGC3886

Product Information

Species	Human
Source	Human spleen
Form	lyophilized powder. Lyophilized from 100 mM sodium acetate, pH 5.5, and 1 mM EDTA.
EC Number	EC 3.4.22.27
Pathway	Adaptive Immune System, organism-specific biosystem; Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Antigen processing-Cross presentation, organism-specific biosystem; Class I MHC mediated antigen processing and presentation, organism-specific biosystem; Endosomal/Vacuolar pathway, organism-specific biosystem
Function	cysteine-type endopeptidase activity; peptidase activity
Unit Definition	One unit will hydrolyze Z-Val-Val-Arg-NHMec to yield 2 nanomoles of 7-amino-4-mehtylcoumarin in 10 minutes at pH 6.5 at 25°C

Storage and Shipping Information

Storage	−70°C