Creative Enzymes®

Native Bacillus licheniformis Alkaline Protease

Cat. No. NATE-0444

Lot. No. (See product label)

Introduction

Description	Proteinase catabolizes proteins by hydrolysis of peptide bonds. Proteases are inactivated by serine active-site inhibitors, such as phenylmethylsulfonyl fluoride (PMSF) and diisopropylfluorophosphate.
Applications	The enzyme has been used to optimize release of all mitochondrial populations from homogenized ventricular tissue of rat heart.1 It has also been used in the pre-hybridisation treatment of formalin fixed, paraffin wax-embedded liver specimens for detecting human and viral DNA. This is a proteolytic enzyme isolated from the fermentation of Bacillus licheniformis. It is a serine endoproteinase with a broad specificity towards native and denatured proteins, and is active under alkaline conditions. Product P8038, also known as Subtilisin Carlsberg, has been used to hydrolyze cardiac cells to study the silencing of cardiac mitochondrial NHE1.
Synonyms	ingensin; macropain; multicatalytic endopeptidase complex; prosome; multicatalytic proteinase (complex); MCP; proteasome; large multicatalytic protease; multicatalytic proteinase; proteasome organelle; alkaline protease; 26S protease; triCorn proteinase; triCorn protease; EC 3.4.25.1

Product Information

Source	Bacillus licheniformis
Form	lyophilized powder
EC Number	EC 3.4.25.1
CAS No.	140879-24-9
Molecular Weight	27 Kda
Activity	7.0-14.0 units/mg
Unit Definition	One unit will hydrolyze casein to produce color equivalent to 1.0 µmole (181 µg) of tyrosine per min at pH 7.5 at 37°C (color by Folin-Ciocalteu reagent).