Creative Enzymes®

Native Bacillus licheniformis Proteinase

Cat. No. NATE-0639

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 from Creative Enzymes has been used to optimize release of all mit ochondrial populations from homogenized ventricular tissue of rat heart. 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. This product also known as Subtilisin Carlsberg, has been used to hydrolyze cardiac cells to study the silencing of cardiac mit ochondrial NHE1.
Synonyms	protease; peptidase; proteinase; EC 3.4.21.62; 9014-01-1; Alkaline Protease; Protease from Bacillus licheniformis; Proteinase from Bacillus licheniformis; Subtilo peptidase A

Product Information

Source	Bacillus licheniformis
Form	lyophilized powder
EC Number	EC 3.4.21.62
CAS No.	9001-92-7
Molecular Weight	27 KDa
Purity	crystallization
Activity	7.0-14.0 units/mg solid
Specificity	Subtilisin A is a member of the Serine S8 Endoproteinase family. It has broad specificity with a preference for a large uncharged residue in the P1 position. It hydrolyzes native and denatured proteins, and is active under alkaline conditions.
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).

Storage and Shipping Information

Storage	−20°C