Creative Enzymes®

Native Staph aureus V8 Protease (Endoproteinase Glu-C)

Cat. No. NATE-0730

Lot. No. (See product label)

Introduction

Description	Protease S. aureus V8 (Endoproteinase-Glu-C) specifically cleaves peptide bonds on the COOH-terminal side of either aspartic or glutamic acids. In the presence of ammonium, the enzyme specificity is limited to glutamic sites. It has a molecular weight of 27 kDa daltons and optimum pH's of 4.0 and 7.8 with hemoglobin as the substrate. Protease S. aureus V8 is inhibited by diisopropylfluorophosphate and monovalent anions such as F-, Cl-, CH3COO-and NO3. Enzyme activity is determined by the casein digestion assay described by Drapeau.
Synonyms	EC 3.4.21.19; Staph aureus V8 Protease; Protease, Staph aureus (Endoproteinase Glu-C); Glutamyl endopeptidase; V8 proteinase, endoproteinase Glu-C; staphylococcal serine proteinase

Product Information

Source	Staph aureus V8
Form	Lyophilized powder
EC Number	EC 3.4.21.19
CAS No.	137010-42-5
Molecular Weight	27 kDa (Drapeau 1978).
Purity	Chromatographically purified
Activity	> 500 units per mg dry weight
Optimum pH	4.0 and 7.8 with hemoglobin substrate. (Drapeau et al. 1972).
Inhibitors	Diisopropyl fluorophosphate (DFP) and monovalent anions such as F-, Cl-, Br-, CH3COO-, and NO3-(Houmard 1976).
Unit Definition	One Unit causes a change of 0.001 A280 nm per minute at 37°C, pH 7.8 using casein as the substrate.

Storage and Shipping Information

Storage	Store at 2-8°C
Stability	Autolysis occurs at temperatures > 40°C. The enzyme is fully active in USP 0.2% SDS. Stable for 12 months at 2-8°C.