

## 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<sup>-</sup>, Cl<sup>-</sup>, CH<sub>3</sub>COO<sup>-</sup> and NO<sub>3</sub><sup>-</sup>. 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<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, CH<sub>3</sub>COO<sup>-</sup>, and NO<sub>3</sub><sup>-</sup> (Houmard 1976).

#### Unit Definition

One Unit causes a change of 0.001 A<sub>280</sub> 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.