

## Arginine Specific Protease from Porphyromonas gingivalis

Cat. No. NATE-1602

Lot. No. (See product label)

### Introduction

#### Description

Arginine Specific Protease specifically digests peptides and proteins C-terminal to arginine residues. The protease is specific for Arg-X motifs and does not have activity at lysines as commonly observed using Arg-C. The enzymatic activity of Arginine Specific Protease includes digestion of Arg-Pro linkages, which is difficult to digest with other enzymes. The enzyme is active at pH ranging from pH 5.0-9.0 and in presence of denaturing agents such as 6M urea and 0.1% SDS.

#### Applications

Peptide mapping Protein sequence analysis Protein fingerprinting Post-translational modification analysis

#### Synonyms

Arginine Specific Protease; GingisREX

### Product Information

#### Source

Porphyromonas gingivalis

#### Appearance

White to light yellow powder

#### Form

Lyophilized powder in 20 mM Bis-Tris, 150 mM NaCl, 5 mM CaCl<sub>2</sub>, Ph 6.8 without preservatives

#### Purity

> 95% homogeneity as determined by SDS-PAGE and HPLC.

#### pH Stability

5.0-9.0

#### Optimum pH

6.5-8.0

#### Buffer

To maintain the enzymatically active cysteine in a reduced form, TCEP is added to preserve the reducing environment. Arginine Specific Protease is active in a broad pH range, 5.0-9.0, with optimal activity between pH 6.5-8.0. Digestion can be performed in the presence of chaotropic agents or detergents such as urea, SDS, tween, SDC. Buffers tested and compatible with Arginine Specific Protease activity are Tris, Bis-Tris and ammonium bicarbonate.

### Storage and Shipping Information

#### Storage

The product is shipped on ice and should be stored at -20°C upon arrival.

#### Stability

1 year when stored at -20°C. After reconstitution by addition of water it is stable for at least 1 month at 4-8°C.