

## Native Porcine Prolidase

Cat. No. NATE-0627

Lot. No. (See product label)

### Introduction

#### Description

Prolidase is an enzyme that catalyzes the hydrolysis of the imide bond between an  $\alpha$ -carboxyl group and proline or hydroxyproline. The protein forms a homodimer that hydrolyzes dipeptides or tripeptides with C-terminal proline or hydroxyproline residues.

#### Applications

Prolidase has an important role recycling of proline and collagen production. It is used to study mutations in the PEPD gene that cause prolidase deficiency. It is used to hydrolyze proteins with C-terminal proline or hydroxyproline residues. Prolidase from porcine kidney, has been used to hydrolyze peptide bonds from the amino terminus when studying enzymatic methylation of membrane proteins.

#### Synonyms

Xaa-Pro dipeptidase; prolidase; imidodipeptidase; proline dipeptidase; peptidase D; gamma-peptidase; X-Pro dipeptidase; EC 3.4.13.9; 9025-32-5

### Product Information

#### Species

Porcine

#### Source

Porcine kidney

#### Form

Supplied as a lyophilized powder containing Tris buffer salt and MnCl<sub>2</sub>.

#### EC Number

EC 3.4.13.9

#### CAS No.

9025-32-5

#### Activity

> 100 units/mg protein

#### Composition

Protein, 20-60% Lowry

#### Unit Definition

One unit will hydrolyze 1.0  $\mu$ mole of Gly-Pro per min at pH 8.0 at 40°C.

### Storage and Shipping Information

#### Storage

-20°C