

## Native Streptococcus faecalis L-Phenylalanine decarboxylase

Cat. No. NATE-0415

Lot. No. (See product label)

### Introduction

**Description** In enzymology, a phenylalanine decarboxylase (EC 4.1.1.53) is an enzyme that catalyzes the chemical reaction: L-phenylalanine  $\leftrightarrow$  phenylethylamine + CO<sub>2</sub>. Hence, this enzyme has one substrate, L-phenylalanine, and two products, phenylethylamine and CO<sub>2</sub>. This enzyme belongs to the family of lyases, specifically the carboxy-lyases, which cleave carbon-carbon bonds. This enzyme participates in phenylalanine metabolism. It employs one cofactor, pyridoxal phosphate.

**Synonyms** phenylalanine decarboxylase; L-phenylalanine decarboxylase; aromatic L-amino acid decarboxylase; L-phenylalanine carboxy-lyase; EC 4.1.1.53; 9075-72-3

### Product Information

**Source** Streptococcus faecalis

**Form** Dried cells from which activity can be extracted

**EC Number** EC 4.1.1.53

**CAS No.** 9075-72-3

**Activity** > 5 units/g solid

**Unit Definition** One unit will liberate 1.0  $\mu$ mole of CO<sub>2</sub> from L-phenylalanine per min at pH 5.5 at 37°C.

### Storage and Shipping Information

**Storage** -20°C