Creative Enzymes®

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↔ phenylethylamine + CO2. Hence, this enzyme has one substrate, L-phenylalanine, and two products, phenylethylamine and CO2. 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 µmole of CO2 from L-phenylalanine per min at pH 5.5 at 37°C.

Storage and Shipping Information

Storage	−20°C