

Native Streptococcus faecalis L-Tyrosine Decarboxylase

Cat. No. NATE-0421

Lot. No. (See product label)

Introduction

Description

In enzymology, a tyrosine decarboxylase (EC 4.1.1.25) is an enzyme that catalyzes the chemical reaction: L-tyrosine \rightleftharpoons tyramine + CO₂. Hence, this enzyme has one substrate, L-tyrosine, and two products, tyramine and carbon dioxide. This enzyme belongs to the family of lyases, specifically the carboxy-lyases, which cleave carbon-carbon bonds. This enzyme participates in tyrosine metabolism and alkaloid biosynthesis. It employs one cofactor, pyridoxal phosphate.

Applications

L-Tyrosine decarboxylase from Streptococcus faecalis has been used in a study to isolate and identify the carbonyl-active site of diamine oxidase by gas chromatographic mass spectrometry. L-Tyrosine decarboxylase from Streptococcus faecalis has also been used in a study to investigate the adsorption of Streptococcus faecalis on diatomite carriers for use in biotransformations.

Synonyms

tyrosine decarboxylase; EC 4.1.1.25; L-tyrosine decarboxylase; L-(-)-tyrosine apodecarboxylase; L-tyrosine carboxy-lyase; 9002-09-9

Product Information

Source

Streptococcus faecalis

EC Number

EC 4.1.1.25

CAS No.

9002-09-9

Activity

> 0.1 unit/mg solid

Unit Definition

One unit will cause the decomposition of 1.0 μ mole of L-tyrosine per min at pH 6.2 at 37°C.

Storage and Shipping Information

Storage

-20°C