

## 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 + CO<sub>2</sub>. 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  $\mu$ mole of L-tyrosine per min at pH 6.2 at 37°C.

### Storage and Shipping Information

**Storage** -20°C