

Native *Streptococcus faecalis* L-Tyrosine Decarboxylase Apoenzyme

Cat. No. NATE-0420

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 \leftrightarrow 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 apoenzyme from *Streptococcus faecalis* has been used in a study to purify and characterize tyrosine decarboxylase and aromatic-L-amino-acid decarboxylase. L-Tyrosine decarboxylase apoenzyme from *Streptococcus faecalis* has also been used in a study to investigate the stereospecificity of sodium borohydride reduction of tyrosine decarboxylase.

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 <0.005 unit/mg solid (without pyridoxal 5-phosphate), > 0.05 unit/mg solid (with excess pyridoxal 5-phosphate)

Unit Definition One unit will liberate 1.0 μ mole of CO₂ from L-tyrosine per min at pH 5.5 at 37°C.

Storage and Shipping Information

Storage -20°C