Creative Enzymes®

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↔ 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 Strept oc occus faecalis has been used in a study to purify and characterize tyrosine decarboxylase and aromatic-L-amino-acid decarboxylase. L-Tyrosine decarboxylase apoenzyme from Strept oc occus 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 μmole of CO2 from L-tyrosine per min at pH 5.5 at 37°C.

Storage and Shipping Information

Storage	−20°C