

tyrosine phenol-lyase

Cat. No. EXWM-4933

Lot. No. (See product label)

Introduction

Description

A pyridoxal-phosphate protein. The enzyme cleaves a carbon-carbon bond, releasing phenol and an unstable enamine product that tautomerizes to an imine form, which undergoes a hydrolytic deamination to form pyruvate and ammonia. The latter reaction, which can occur spontaneously, can also be catalysed by EC 3.5.99.10, 2-iminobutanoate/2-iminopropanoate deaminase. The enzyme also slowly catalyses similar reactions with D-tyrosine, S-methyl-L-cysteine, L-cysteine, L-serine and D-serine.

Synonyms

β-tyrosinase; L-tyrosine phenol-lyase (deaminating)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.1.99.2

CAS No.

9059-31-8

Reaction

L-tyrosine + H₂O = phenol + pyruvate + NH₃ (overall reaction); (1a) L-tyrosine = phenol + 2-aminoprop-2-enoate; (1b) 2-aminoprop-2-enoate = 2-iminopropanoate (spontaneous); (1c) 2-iminopropanoate + H₂O = pyruvate + NH₃ (spontaneous)

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.