Creative Enzymes®

tryptophanase

Cat. No. EXWM-4925

Lot. No. (See product label)

Introduction

Description	A pyridoxal-phosphate protein, requiring K+. The enzyme cleaves a carbon-carbon bond, releasing indole 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. Also catalyses 2,3-elimination and β-replacement reactions of some indole-substituted tryptophan analogues of L-cysteine, L-serine and other 3-substituted amino acids.
Synonyms	L-tryptophanase; L-tryptophan indole-lyase (deaminating); TNase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.1.99.1
CAS No.	9024-00-4
Reaction	L-tryptophan + H2O = indole + pyruvate + NH3 (overall reaction); (1a) L-tryptophan = indole + 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.