Creative Enzymes®

allophanate hydrolase

Cat. No. EXWM-4443

Lot. No. (See product label)

Introduction

Description	Along with EC 3.5.2.15 (cyanuric acid amidohydrolase) and EC 3.5.1.84 (biuret amidohydrolase), this enzyme forms part of thecyanuric-acid metabolism pathway, which degrades s-triazide herbicides, such as atrazine [2-chloro-4-(ethylamino)-6-(isopropylamino)-1,3,5-triazine], in bacteria. The yeast enzyme (but not that from green algae) also catalyses the reaction of EC 6.3.4.6, urea carboxylase, thus bringing about the hydrolysis of urea to CO2 and NH3 in the presence of ATP and bicarbonate. The enzyme from Pseudomonas sp. strain ADP has a narrow substrate specificity, being unable to use the structurally analogous compounds urea, hydroxyurea or methylcarbamate as substrate.
Synonyms	allophanate lyase; AtzF; TrzF

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 3.5.1.54
CAS No.	9076-72-6
Reaction	urea-1-carboxylate + H2O = 2 CO2 + 2 NH3
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 ℃.