

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 the cyanuric-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 °C for short term. For long term storage, store it at -20 °C~-80 °C.