Creative Enzymes®

Creatinase from Pseudomonas sp., Recombinant

Cat. No. NATE-0162

Lot. No. (See product label)

Introduction

Description	In enzymology, a creatinase (EC 3.5.3.3) is an enzyme that catalyzes the chemical reaction:creatine + H2O↔ sarcosine + urea. Thus, the two substrates of this enzyme are creatine and H2O, whereas its two products are sarcosine and urea. This enzyme belongs to the family of hydrolases, those acting on carbon-nitrogen bonds other than peptide bonds, specifically in linear amidines. Creatinase accelerates the conversion reaction of creatine and water molecule to sarcosine and urea. It always acts in homodimer state and is induced by choline chloride.
Applications	Creatine amidinohydrolase is a clinically important enzyme used in the determination of creatinine in blood and urine.
Synonyms	Creatine amidinohydrolase; creatinase; 37340-58-2; EC 3.5.3.3

Product Information

Species	Pseudomonas sp.
Source	E. coli
Form	lyophilized powder
EC Number	EC 3.5.3.3
CAS No.	37340-58-2
Activity	10-20 units/mg protein
Composition	Protein, ~70% biuret
Unit Definition	One unit will hydrolyze 1.0 μmole of creatine to urea and sarcosine per min at pH 7.5 at 37°C.

Storage and Shipping Information

Stability	2-8°C