

Native Flavobacterium sp. Creatinase

Cat. No. NATE-0161

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.

Synonyms Creatine amidinohydrolase; creatinase; 37340-58-2; EC 3.5.3.3

Product Information

Source Flavobacterium sp.

Form lyophilized powder

EC Number EC 3.5.3.3

CAS No. 37340-58-2

Activity 10-20 units/mg protein

Composition Protein, ~75% biuret

Buffer Lyophilized powder containing phosphate buffer and lactose

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