

Creatine amidinohydrolase, Enzyme Activity

Catalog	Unit
TBP0014-1KU	1000 U
TBP0014-5KU	5000 U

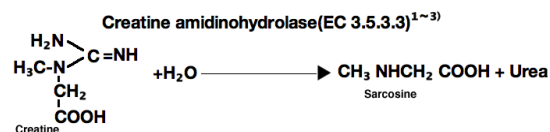
Preparation and Specification

Appearance: (-221) White amorphous powder, lyophilized (-229) Clear solution

Activity: GradeII (-221) 4.0U/mg-solid or more (-229) 2000U/ml or more

Contaminants: NADH oxidase $\leq 5.0 \times 10^{-2}\%$; Catalase $\leq 2.0\%$

Stabilizers: Sugars, EDTA



Properties

Stability: (-221) Stable at -20°C for at least One year (-229) Stable at 4°C

Molecular weight: approx. 67,000 (by gel filtration)

Structure: 2 subunits per enzyme molecule

Isoelectric point: 4.5±0.1

Michaelis constant: 4.5×10^{-3} M (Creatine)

Inhibitors: Hg⁺⁺, Cu⁺⁺, Ag⁺, SH reagent (NEM), PCMB

Optimum pH: 6.5-7.5

Optimum temperature: 40-50°C

pH Stability: pH 4.0-10.0 (25°C, 20hr)

Thermal stability: below 50°C (pH 7.5, 30min)

Applications

This enzyme is useful for enzymatic determination of creatine and creatinine when coupled with creatinine amidohydrolase (CNH-211, CNH-311) and sarcosine oxidase (SAO-351) in clinical analysis.

For research use only