

## Creatinine deiminase, Enzyme Activity

Catalog	Unit
TBP0011-250U	250 U
TBP0011-1KU	1000 U

### Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: Grade III 10U/mg-solid or more (containing approx. 30% of stabilizer)

Contaminants: Creatinine amidohydrolase  $\leq 1.0 \times 10^{-2}\%$ ;

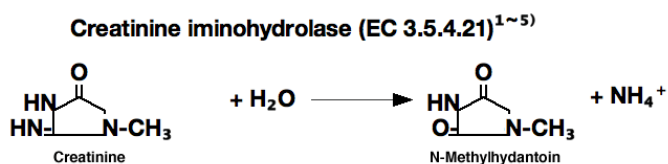
Creatine amidinohydrolase  $\leq 1.0 \times 10^{-2}\%$ ;

Urease  $\leq 1.0 \times 10^{-2}\%$ ;

NADH oxidase  $\leq 1.0 \times 10^{-2}\%$ ;

$\text{NH}_4^+ \leq 1.0 \times 10^{-2}\%$   $\mu\text{g/u}$

Stabilizer: Mannitol



### Properties

Stability: Stable at -20°C for at least One year

Molecular weight: approx. 260,000

Isoelectric point: 4.4

Michaelis constant:  $3.5 \times 10^{-3}\text{M}$  (Creatinine)

Structure: 6 subunits per enzyme molecule

Inhibitors: Ag<sup>+</sup>, Hg<sup>++</sup>, o-phenanthroline, monoiodoacetate

Optimum pH: 8.5-9.5

Optimum temperature: 65-75°C

pH Stability: pH 7.0-11.0 (30°C, 20hr)

Thermal stability: below 65°C (pH 7.5, 1hr)

### Applications

This enzyme is useful for enzymatic determination of creatinine when coupled with glutamate dehydrogenase (GTD-211, GTD-209, GTD-309) in clinical analysis.

For research use only