

## Urease, Enzyme Activity

Catalog	Unit
TBP0044-1KU	1000 U
TBP0044-5KU	5000 U

### Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: Gradell(-201) 100U/mg-solid or more

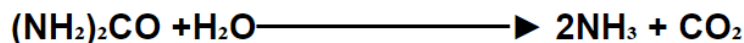
Contaminants: Asparaginase  $\leq 2.0 \times 10^{-2}\%$

Arginase  $\leq 2.0 \times 10^{-3}\%$

$\text{NH}_4^+ \leq 5.0 \times 10^{-4} \mu\text{g/U}$

Stabilizers: EDTA, glutathione, succinate, BSA

### Urea amidohydrolase (EC 3.5.1.5)



### Properties

Stability: Stable at  $-20^\circ\text{C}$  for at least One year

Molecular weight: approx. 480,000

Isoelectric point: 5.0-5.1

Michaelis constant:  $1.05 \times 10^{-2}\text{M}$  (Urea)

Structure: 8 active sites with SH-groups per the enzyme molecule

Inhibitors: Heavy metal ions ( $\text{Ag}^+$ ,  $\text{Hg}^{++}$ , etc.)

Optimum pH: 6.0

Optimum temperature:  $60^\circ\text{C}$

pH Stability: pH 5.5-8.5 ( $30^\circ\text{C}$ , 17hr)

Thermal stability: below  $50^\circ\text{C}$  (pH 8.0, 60min)

### Applications

This enzyme is useful for enzymatic determination of urea in clinical analysis.

For research use only