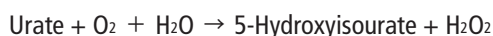


rUricase-03

recombinant Uricase EC 1.7.3.3

from *Bacteria*

Reaction Equation



Specification

Specific Activity

U/mg protein > 3 units

Contaminants

Catalase < 1%

Properties

pH stability : pH 6.0 - 9.5 (30°C, 1 week)
Thermal stability : $\leq 55^\circ\text{C}$ (pH 8.5, 10 min)
Optimum pH : 8.5
Optimum temp. : 45 - 55°C
Km value : 1.8×10^{-5} mol/L (Urate, pH 7.0)
 1.6×10^{-5} mol/L (Urate, pH 8.5)
Molecular weight : 35 kDa (SDS-PAGE)

Assay Procedure

I Spectrophotometric Method

Wavelength : 293 nm, Light path length : 1 cm

Final volume : 3.02 mL, Temperature : 37°C

Pipette the following reagents into a cuvette

	K-phosphate (50 mmol/L, pH 7.4)
3.00 mL	containing Borate (50 mmol/L) Urate (0.125 mmol/L)
0.02 mL	rUricase (approx. 1 U/mL)

II Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{12.6 \cdot d \cdot v} = \text{U/mL}$$

$\Delta A/\text{min}$ = The change in absorbance at 293 nm/minute

V = Total volume of reaction mixture (3.02 mL)

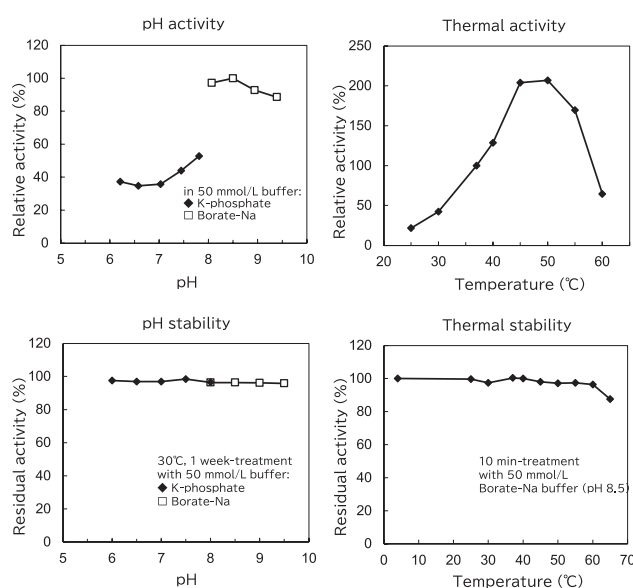
D = Enzyme dilution factor

12.6 = mmol/L extinction coefficient of Urate
($\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and Storage

Lyophilized powder (Ammonium sulfate free)

Store below -20°C

Cat. No./Package

Cat. No.	Package
46785903	Bulk