Uricase

Catalogue No. URIC-70-1701, 70-1701-01

ORIGIN

Bacillus fastidiosus

SPECIFICATIONS

Appearance . . . . . White-off white free flowing powder
Activity . . . . . >10 U/mg powder at 37°C
Specific Activity . . . . . >15 U/mg protein at 37°C
Contaminants:

- Cholesterol oxidase . . . . . <0.005% by activity
- Catalase . . . . . <1% by activity
- Glucose oxidase . . . . . <0.005% by activity

CHARACTERISTICS

Optimum pH . . . . . 8.9 to 9.2 in 0.02M borate buffer.

- At pH values below 8.0 uricase is much more active in phosphate buffer than in borate buffer.

Lyophilised Stability . . . . . Stable for 12 months desiccated at -20°C

ASSAY PRINCIPLE

Uricase catalyses the following reaction:

$$\text{Uric Acid} + 2H_2O_2 + O_2 \xrightarrow{\text{Uricase}} \text{Allantoin} + H_2O_2 + CO_2$$

As uric acid degrades there is a decrease in absorbance which can be measured spectrophotometrically at 292nm.

UNIT DEFINITION

One unit of activity is defined as the amount of enzyme that will catalyse the oxidation of 1.0 micromole of uric acid per minute at 37°C under standard assay conditions.

(See Analytical Method for full details)

genzyme Diagnostics

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