

Uricase

Catalogue No. URIC-70-1721 and 70-1721-01

ORIGIN

Arthrobacter globiformis

SPECIFICATIONS

Appearance White to off-white freeze dried powder
 Activity ≥10 U/mg powder at 25°C

ASSAY PRINCIPLE

Uricase catalyses the following reaction:



As uric acid degrades there is a decrease in absorbance which can be measured spectrophotometrically at 293nm.

UNIT DEFINITION

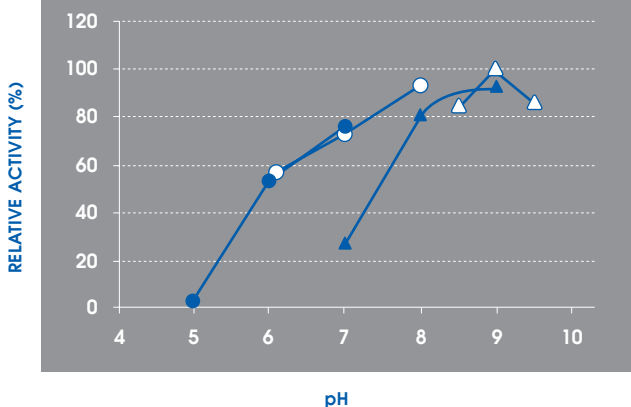
One unit of activity is defined as the amount of enzyme that will catalyse the oxidation of 1.0 micromole of uric acid per minute at 25°C under the standard assay conditions.

(See Analytical Method for full details)

CHARACTERISTICS

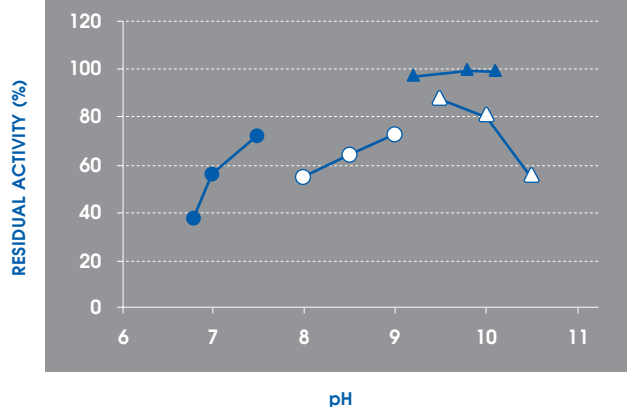
Molecular weight 117kDa (TSK gel G3000SWXL)
 Isoelectric point 4.61
 K_m values 1.3 x 10⁻⁴ M
 Optimum pH (**Fig. 1**) 8.5 - 9.5
 pH stability (**Fig. 2**) 6.0 - 9.5 (37°C, 60 min.)
 Thermal stability (**Fig. 3**) Stable at 50°C and below (pH 9.0, 10 min.)
 Lyophilised stability 1 year at -20°C

FIG.1 pH Optimum



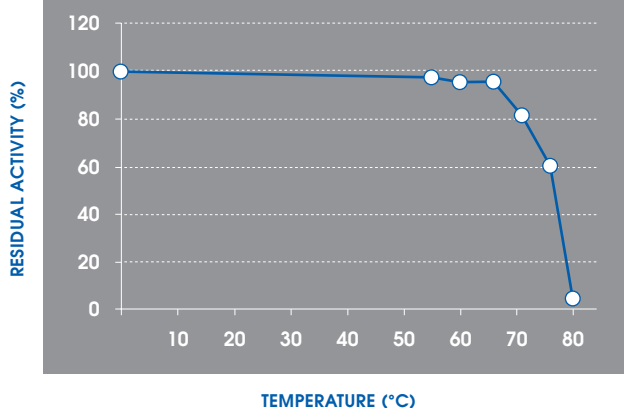
● 3,3-DIMETHYLGLUTARATE-NAOH BUFFER ○ PHOSPHATE BUFFER
▲ TRIS-HCL BUFFER △ BORATE BUFFER

FIG.2 pH Stability



● PHOSPHATE BUFFER ○ TRIS BUFFER
▲ GLYCINE BUFFER △ BORATE BUFFER

FIG.3 Thermal Stability



TEMPERATURE (°C)

pH 9.0, 10 min.
20mM Borate buffer

NOTES:



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