Creative Enzymes®

Native Candida sp. Uricase

Cat. No. DIA-175

Lot. No. (See product label)

Introduction

Description	The enzyme urate oxidase (UO), or uricase or factor-independent urate hydroxylase, absent in humans, catalyzes the oxidation of uric acid to 5-hydroxyisourate: Uric acid + O2 + H2O → 5-hydroxyisourate + H2O2 → allantoin + CO2
Applications	This enzyme is useful for enzymatic determination of uric acid in clinical analysis.
Synonyms	urate oxidase; uric acid oxidase; uricase; uricase; urate: oxygen oxidoreductase; EC 1.7.3.3; uricase II

Product Information

Source	Candida sp.
Appearance	White amorphous powder, lyophilized
Form	Freeze dried powder
EC Number	EC 1.7.3.3
CAS No.	9002-12-4
Molecular Weight	approx. 120 kDa
Activity	GradeⅡ 4.0U/mg-solid or more (containing approx.20% of stabilizers)
Contaminants	Catalase < 1.0%
Isoelectric point	5.4
pH Stability	pH 7.0-11.0 (25°C, 20hr)
Optimum pH	8.5
Thermal stability	below 50°C (pH 8.5, 10min)
Optimum temperature	40°C
Michaelis Constant	2.5×10^{-5}M (Uric acid)
Structure	4 subunits per molecule (Reactive SH groups are present in the enzyme molecule)
Inhibitors	Heavy metal ions, cyanide,various urate analogs
Stabilizers	Borate, EDTA, nonionic detergents

Storage and Shipping Information

Stability	Stable at-20°C for at least one year