Creative Enzymes®

Uricase from E. coli, Recombinant

Cat. No. DIA-415

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
Synonyms	urate oxidase; uric acid oxidase; uricase; uricase; urate: oxygen oxidoreductase; EC 1.7.3.3; uricase II

Product Information

Species	E. coli
Source	E. coli
Appearance	Light brownish lyophilizate
EC Number	EC 1.7.3.3
CAS No.	9002-12-4
Molecular Weight	ca. 90 kDa
Activity	> 4 U/mg lyophilizate
Contaminants	catalase < 1.0%
pH Stability	7.0–11.0
Optimum pH	8.5
Thermal stability	below 55°C
Optimum temperature	45°C
Michaelis Constant	1.1 x 10^-5 M (uric acid)
Structure	2 subunits of 35 kDa (SDS-PAGE)
Inhibitors	Hg2+, Ag+
Stabilizers	Citrate, sucrose
Unit Definition	One unit (U) is defined as the amount of enzyme which oxidizes 1 µmol of uric acid per min at 25°C and pH 8.5.

Storage and Shipping Information

Storage	at -20°C
Stability	Stability (liquid form) stable at 37°C for at least ten days Stability (powder form) stable at 30°C at least three weeks