

## 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:  $\text{Uric acid} + \text{O}_2 + \text{H}_2\text{O} \rightarrow 5\text{-hydroxyisourate} + \text{H}_2\text{O}_2 \rightarrow \text{allantoin} + \text{CO}_2$

**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** Gradell 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**  $2.5 \times 10^{-5}\text{M}$  (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