

Xanthine Oxidase from Arthrobacter sp.

Cat. No. NATE-1719

Lot. No. (See product label)

Introduction

Description

Xanthine oxidase is a form of xanthine oxidoreductase, a type of enzyme that generates reactive oxygen species. These enzymes catalyze the oxidation of hypoxanthine to xanthine and can further catalyze the oxidation of xanthine to uric acid. These enzymes play an important role in the catabolism of purines in some species, including humans.

Synonyms

EC 1.17.3.2; Xanthine oxidase; XO; XAO

Product Information

Source

Arthrobacter sp.

Form

Reddish brown amorphous powder, lyophilized

EC Number

EC 1.17.3.2

CAS No.

9002-17-9

Molecular Weight

160 kDa (gel)

Activity

>50U/mg protein

Isoelectric point

4

pH Stability

6.0~9.5(30°C,16hr)

Optimum pH

7.0~ 7.5

Thermal stability

< 55°C (pH 7.5, 20min)

Optimum temperature

55°C

Michaelis Constant

1.4×10^{-4} M (Xanthine)

Inhibitors

Ag⁺, Hg²⁺

Unit Definition

One unit will convert one micromole of Xanthine to Uric acid per min at pH 7.5 at 37°C.

Notes

INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.

Storage and Shipping Information

Storage

Store at -20°C.