Creative Enzymes®

Native Bovine Xanthine Oxidase

Cat. No. NATE-0732

Lot. No. (See product label)

Introduction

Description	Xanthine oxidase is a molybdenum-containing enzyme that is found in the cytosol, and may be strongly inhibited by flavonoids. It plays a vital role in the metabolism of some drugs, as well as purines and pyrimidines. It is also known to be a biological source of reactive oxygen species. Xanthine oxidase was shown to be involved in the reduction of cytochrome c by the generation of superoxide anions following the oxidation of xanthine. These free radicals are responsible for reducing cytochrome c.
Synonyms	Xanthine oxidase; XO; xanthine oxidoreductase; EC 1.17.3.2; 9002-17-9; XOD; Xanthine:oxygen oxidoreductase; hypoxanthine oxidase; hypoxanthine:oxygen oxidoreductase; Schardinger enzyme; hypoxanthine-xanthine oxidase; xanthine:O2 oxidoreductase; xanthine:xanthine oxidase

Product Information

Species	Bovine
Source	Bovine milk
Form	Type I, Type II, ammonium sulfate suspension; Suspension in 2.3 M (NH4)2SO4 containing 1 mM sodium salicylate; Type III, ammonium sulfate suspension, Suspension in 2.3 M (NH4)2SO4, 10 mM sodium phosphate buffer, pH 7.8, containing 1 mM EDTA and 1 mM sodium salicylate; Type IV, lyophilized powder, Contains 0.5% sodium salicylate.
EC Number	EC 1.17.3.2.
CAS No.	9002-17-9
Activity	Type I, > 0.4 units/mg protein; Type II, 0.1-0.4 units/mg protein; Type III, 1.0-2.0 units/mg protein; Type IV, 0.4-1.0 units/mg protein.
Unit Definition	One unit will convert 1.0 µmole of xanthine to uric acid per min at pH 7.5 at 25°C. Approx. 50% of the activity is obtained with hypoxanthine as substrate.

Storage and Shipping Information

Storage	2-8°C