

## 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**  $1.4 \times 10^{-4}$  M (Xanthine)

**Inhibitors** Ag<sup>+</sup>, Hg<sup>2+</sup>

**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.