

## Native Xanthine dehydrogenase from Microorganism

Cat. No. NATE-1064

Lot. No. (See product label)

### Introduction

**Description** Xanthine dehydrogenase belongs to the group of molybdenum-containing hydroxylases involved in the oxidative metabolism of purines. The enzyme is a homodimer. Xanthine dehydrogenase can be converted to xanthine oxidase by reversible sulfhydryl oxidation or by irreversible proteolytic modification.

**Applications** Useful for the enzymatic determination of inorganic phosphate.

**Synonyms** xanthine dehydrogenase; NAD<sup>+</sup>-xanthine dehydrogenase; xanthine-NAD<sup>+</sup> oxidoreductase; xanthine/NAD<sup>+</sup> oxidoreductase; xanthine oxidoreductase; XDH; EC 1.17.1.4

### Product Information

**Source** Microorganism

**Appearance** Brownish solution

**Form** Liquid

**EC Number** EC 1.17.1.4

**CAS No.** 9054-84-6

**Molecular Weight** 240 kDa

**Activity** > 100 U/mL

**Contaminants** NADH oxidase < 1.3%

**Isoelectric point** pH 4.5±0.2

**pH Stability** 6.5 - 9.5

**Optimum pH** 8.5

**Thermal stability** Stable at 60°C and below (pH 7.5, 15 mins)

**Optimum temperature** 55°C

**Unit Definition** One unit is defined as the amount of enzyme which converts 1 µmole of xanthine to uric acid per minute at 37°C under the conditions specified in the assay procedure.

### Storage and Shipping Information

**Storage** Storage at -20°C in the presence of a desiccant is recommended.