

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⁺-xanthine dehydrogenase; xanthine-NAD⁺ oxidoreductase; xanthine/NAD⁺ 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.