Creative Enzymes®

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 determiantion 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.