Creative Enzymes®

Native Bovine Malic Dehydrogenase

Cat. No. NATE-0445

Lot. No. (See product label)

Introduction

Description	Malic dehydrogenase (MDH) exists as two isoforms within eukaryotic cells, one that is expressed in the mitochondria and functions in the TCA cycle and one in the cytoplasm that converts malate from the mitochondria back into oxaloacetate.
Applications	Malic dehydrogenase has been used in a study to assess a flow injection system for on-line monitoring of fumaric acid in biological pr ocesses. 1 It has also been used in a study to investigate a root-knot nematode parasitizing peanut in Texas.
Synonyms	malic dehydrogenase; L-malate dehydrogenase; NAD-L-malate dehydrogenase; malic acid dehydrogenase; NAD-dependent malic dehydrogenase; NAD-malate dehydrogenase; NAD-malic dehydrogenase; malate (NAD) dehydrogenase; NAD-dependent malate dehydrogenase; NAD-specific malate dehydrogenase; NAD-linked malate dehydrogenase; MDH; L-malate-NAD+ oxidoreductase; EC 1.1.1.37; 9001-64-3

Product Information

Species	Bovine
Source	Bovine heart
Form	ammonium sulfate suspension; Suspension in 3 M (NH4)2SO4-0.01 M KH2PO4 solution, pH 7.3
EC Number	EC 1.1.1.37
CAS No.	9001-64-3
Activity	2000-4000 units/mg protein (modified Warburg-Christian)
Contaminants	<0.01% Glutamic-Oxalacetic Transaminase; <0.01% Glutamic-Pyruvic Transaminase
Unit Definition	One unit will convert 1.0 µmole of oxalacetate and β-NADH to L-malate and β-NAD per min at pH 7.5 at 25°C.

Storage and Shipping Information

Storage	2-8°C