

## Native Porcine Malic Dehydrogenase

Cat. No. NATE-0447

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.

**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<sup>+</sup> oxidoreductase; EC 1.1.1.37; 9001-64-3

### Product Information

**Species** Porcine

**Source** Porcine heart

**Form** Type I, Type III, ammonium sulfate suspension; Suspension in 2.8 M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> solution, pH 6.0; Type II, ammonium sulfate suspension, Suspension in 3.2 M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 0.1 M KH<sub>2</sub>PO<sub>4</sub>, pH 7.0; Type IV, buffered aqueous glycerol solution, Solution in 50% glycerol containing 0.05 M potassium phosphate buffer, pH 7.5.

**EC Number** EC 1.1.1.37

**CAS No.** 9001-64-3

**Activity** Type I, ~1,000 units/mg protein (biuret); Type II, > 400 units/mg protein (biuret); Type III, > 600 units/mg protein (biuret); Type IV, 600-1000 units/mg protein (biuret)

**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, unless otherwise indicated below.

### Storage and Shipping Information

**Storage** 2-8°C