

## L-Malate dehydrogenase from E. coli, Recombinant

Cat. No. NATE-1107

Lot. No. (See product label)

### Introduction

**Description** Malate dehydrogenase is an enzyme in the citric acid cycle that catalyzes the conversion of malate into oxaloacetate (using NAD<sup>+</sup>) and vice versa (this is a reversible reaction). Malate dehydrogenase is not to be confused with malic enzyme, which catalyzes the conversion of malate to pyruvate producing NADPH. Malate dehydrogenase is also involved in gluconeogenesis, the synthesis of glucose from smaller molecules.

**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-sp; ECific malate dehydrogenase; NAD-linked malate dehydrogenase; MDH; L-malate-NAD<sup>+</sup> oxidoreductase; S-malate: NAD<sup>+</sup> oxidoreductase; EC 1.1.1.37; Malate Dehydrogenase

### Product Information

**Source** E. coli

**Form** Liquid

**EC Number** EC 1.1.1.37

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

**Molecular Weight** ~ 34kD

**Activity** ~ 1,500 U/mg protein

**Unit Definition** One Unit is defined as the amount of enzyme required to produce one  $\mu$ mole of NAD<sup>+</sup> from NADH in the presence of oxaloacetic acid in sodium phosphate buffer at pH 7.5 and 25°C.

### Storage and Shipping Information

**Storage** 4°C