

Native Porcine Malate Dehydrogenase, IFCC Quality

Cat. No. DIA-278

Lot. No. (See product label)

Introduction

- Description** Dehydrogenase that catalyzes the interconversion of malate to oxaloacetate. Rely on the proven diagnostic quality of this product. Tested according to the recommendations of the International Federation of Clinical Chemistry (IFCC).
- Applications** Use Malate Dehydrogenase in diagnostic tests for the determination of aspartate aminotransferase or in applications for citric and acetic acid testing.
- Synonyms** Malate Dehydrogenase, IFCC Quality; malic dehydrogenase; L-malate dehydrogenase; malic acid dehydrogenase; MDH

Product Information

- Species** Porcine
- Source** Porcine heart
- Appearance** White lyophilizate
- Molecular Weight** 70 kDa
- Activity** >70 U/mg lyophilizate
- Contaminants** Aspartate aminotransferase (AST/GOT): <0.001 Alanine aminotransferase (ALT/GPT): <0.001
Glutamate dehydrogenase: <0.005
- Isoelectric point** 6.1-6.4
- pH Stability** 7.0-9.0
- Optimum pH** 7.5
- Thermal stability** Up to +40°C
- Michaelis Constant** L-malate: 4.0×10^{-4} mol/l L-tartrate: 9.0×10^{-3} mol/l meso-tartrate: 1.2×10^{-3} mol/l oxaloacetate: 3.3×10^{-5} mol/l
- Specificity** L-configuration of malate and tartrate. NAD can be replaced by its analogs, but not by NADP.
- Activators** Phosphate, arsenate, Zn²⁺
- Inhibitors** Iodinated compounds such as iodine cyanide, thyroxine and molecular iodine, phenols, 1,10-phenanthroline, 8-hydroxyquinoline, sulfide, nicotinic acidamide, adenine, AMP, ATP; oxaloacetate (excess).

Storage and Shipping Information

- Stability** At +2 to +8°C within specification range for 12 months. Store dry.