

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.