Creative Enzymes®

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 x 10-4 mol/l L-tartrate: 9.0 x 10-3 mol/l meso-tartrate: 1.2 x 10-3 mol/l oxaloacetate: 3.3 x 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.