

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, Zn^{2+}

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.