

Native Porcine heart Lactate dehydrogenase

Cat. No. DIA-206

Lot. No. (See product label)

Introduction

Description A lactate dehydrogenase (LDH or LD) is an enzyme found in nearly all living cells (animals, plants, and prokaryotes). LDH catalyzes the conversion of pyruvate to lactate and back, as it converts NADH to NAD⁺ and back. A dehydrogenase is an enzyme that transfers a hydride from one molecule to another.

Applications This enzyme is useful for enzymatic determination of numerous metabolites, e.g.ATP, ADP, glucose, creatinine, pyruvate, lactate and glycerol, and of enzyme activities, e.g.GPT, PK and CPK when coupled with the related enzymes.

Synonyms Lactate dehydrogenase; EC 1.1.1.27; LDH; LD

Product Information

Species Porcine

Source Porcine heart

Appearance Crystalline suspension in 1.6M ammonium sulfate solution

EC Number EC 1.1.1.27

CAS No. 9001-60-9

Molecular Weight 115 kDa±6,500

Activity Gradell 2,000U/ml or more

Contaminants Malate dehydrogenase < 5.0×10⁻²% Pyruvate kinase < 3.0×10⁻²% GPT < 3.0×10⁻²%

pH Stability pH 6.0-8.0(23°C, 22hr)

Optimum pH 6.0-7.4

Thermal stability below 50°C(pH 7.4, 10min)

Optimum temperature above 60°C

Michaelis Constant 2.5×10⁻²M (Lactate), 1.0×10⁻⁴M (Pyruvate)

Inhibitors I⁻, Ag⁺, Hg⁺⁺, p-chloromercuribenzoate, LDH inhibitors (formed from NADH)

Stabilizers NADH, 2-mercaptoethanol

Storage and Shipping Information

Stability Stable at 5°C for at least one year