

Native Lactate Dehydrogenase from Thermophilic bacteria

Cat. No. DIA-400

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

Diagnostic test and biosensors; NADH recycling. This enzyme is a potential candidate for biocatalysis, suitable for pharmaceutical development / manufacturing.

Synonyms

Lactate dehydrogenase; EC 1.1.1.27; LDH; LD

Product Information

Source

Thermophilic bacteria

Form

Frozen Liquid

EC Number

EC 1.1.1.27

CAS No.

9001-60-9

Optimum pH

~8.0

Thermal stability

~100% stability after 1 hour at 70°C

Optimum temperature

70°C

Buffer

20 mM Tris-HCl (pH 8.0)

Unit Definition

One unit is defined as the amount of enzyme oxidizing 1 μmol of NADH per 1 minute ($\epsilon_{340} = 6.22 \text{ mM}^{-1} \text{ cm}^{-1}$).

Storage and Shipping Information

Storage

Store at -20°C