

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