

## 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<sup>+</sup> 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