

# RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# **Recombinant Lactate Dehydrogenase**

**Catalog No.** 228-11015

**Source** 

Escherichia Coli

### **Synonyms**

Lactate Dehydrogenase, LDH.

#### Introduction

Lactate dehydrogenase (LDH) is an enzyme(EC1.1.1.27) present in a wide variety of organisms, including plants and animals.

A tetrameric enzyme that catalyses the interconversion of pyruvateand lactate with concomitant interconversion of NADH and NAD+. At high concentrations of pyruvate, the enzyme exhibits feedback inhibition and the rate of conversion of pyruvate to lactate is decreased. In vertebrates, genes for three different subunits (LDH-A, LDH-B and LDH-C) exist.

### Description

The DNA encoding chicken LDH-B is cloned from cDNA library of chicken heart.

### Physical Appearance

Sterile lyophilized powder.

#### Formulation:

The protein (1 mg/ml) was lyophilized with 0.1mg potassium phosphate.

### Solubility

It is recommended to reconstitute the lyophilized LDH in sterile  $18M\Omega$ -cm H2O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Lactate Dehydrogenase although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution LDH should be stored at 4°C between 2-7 days and for future use below -18°C.

Please prevent freeze-thaw cycles.



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### **Purity**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

## **Biological Activity**

The specific activity was found to be 258 U/mg protein.

### **Unit Definition**

One unit is defined as 1 umol of NAD+ production per minute under the assay conditions (25°C, pH 7.0). Both transaminase activities include a-hydroxyglutarate dehydrogenase activity.