

## D-Lactate dehydrogenase from Bacteria, Recombinant

Cat. No. NATE-1042

Lot. No. (See product label)

### Introduction

#### Description

In enzymology, a D-lactate dehydrogenase is an enzyme that catalyzes the chemical reaction: (D)-lactate + 2 ferricytochrome c  $\leftrightarrow$  pyruvate + 2 ferrocycytochrome c. Thus, the two substrates of this enzyme are (D)-lactate and ferricytochrome c, whereas its two products are pyruvate and ferrocycytochrome c. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with a cytochrome as acceptor. This enzyme participates in pyruvate metabolism. It employs one cofactor, FAD.

#### Synonyms

EC 1.1.1.28; D-Lactic Dehydrogenase; 9028-36-8; (D)-lactate:ferricytochrome-c 2-oxidoreductase; lactic acid dehydrogenase; D-lactate (cytochrome) dehydrogenase; cytochrome-dependent D-(–)-lactate dehydrogenase; D-lactate-cytochrome c reductase; D-(–)-lactic cytochrome c reductase

### Product Information

<b>Species</b>	Bacteria
<b>Source</b>	E. coli
<b>Form</b>	Lyophilized powder
<b>EC Number</b>	EC 1.1.1.28
<b>CAS No.</b>	9028-36-8
<b>Molecular Weight</b>	44 kD (SDS-PAGE)
<b>Activity</b>	> 800 U/mg Protein
<b>Contaminants</b>	Malate dehydrogenase : < 0.03% Myokinase : < 0.02% Pyruvate kinase: <0.003% Alanine aminotransferase: <0.001% Asparate aminotransferase: <0.001% a-Hydroxyglutamate dehydrogenase: <0.001%
<b>pH Stability</b>	5.0 - 10.0
<b>Optimum pH</b>	7
<b>Thermal stability</b>	<50°C
<b>Optimum temperature</b>	45°C

### Storage and Shipping Information

<b>Storage</b>	Below -20°C
----------------	-------------