

D-lactate Dehydrogenase from E. coli, Recombinant

Cat. No. NATE-1654

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 \rightleftharpoons pyruvate + 2 ferrocytochrome c. Thus, the two substrates of this enzyme are (D)-lactate and ferricytochrome c, whereas its two products are pyruvate and ferrocytochrome 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

Source

E. coli

Form

Liquid

Formulation

4.0 mg/ml in 20 mM potassium phosphate, 100 mM NaCl, pH 8.0 and 10% glycerol

EC Number

EC 1.1.1.28

Molecular Weight

39.1 kDa

Purity

> 95% by SDS-PAGE

Activity

> 200 units/mg

Concentration

1 mg/ml

Unit Definition

One unit will convert 1.0 umole of pyruvate to L-lactate and beta-NAD per minute at pH 7.5 at 37°C.

Storage and Shipping Information

Storage

Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.