Creative Enzymes®

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↔ 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

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

Storage and Shipping Information

Storage Below -20°C