Creative Enzymes®

D-Lactate dehydrogenase from Leuconostoc mesenteroides, Recombinant

Cat. No. NATE-1104

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; D-lactate Dehydrogenase

Product Information

Source Leuconostoc mesenteroides

Form Liquid

EC Number EC 1.1.1.28

CAS No. 9028-36-8

Molecular Weight ~ 36.5kD

Activity ~ 1,500 U/mg protein

Unit Definition One Unit is defined as the amount of enzyme required to produce one µmole of D-lactate from pyruvic acid per minute in the presence of NADH in sodium phosphate buffer at pH 7.0 and 25°C.

Storage and Shipping Information

Storage 4°C