

## D-Lactate dehydrogenase, Enzyme Activity

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Catalog	Unit
TBP0031-1KU	1000 U
TBP0031-5KU	5000 U

### Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: Grade II 900 U/mg-solid or more

Contaminants: NADH oxidase  $\leq 1.0 \times 10^{-3}\%$

Malate dehydrogenase  $\leq 1.0 \times 10^{-2}\%$

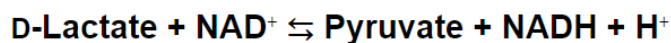
GOT  $\leq 5.0 \times 10^{-3}\%$

GPT  $\leq 5.0 \times 10^{-3}\%$

Myokinase  $\leq 1.0 \times 10^{-2}\%$

Pyruvate kinase  $\leq 1.0 \times 10^{-3}\%$

**(R)-Lactate : NAD<sup>+</sup> oxidoreductase (EC 1. 1. 1. 28)**



### Properties

Stability: Stable at -20°C for at least One year

Molecular weight: approx. 140,000

Isoelectric point: 4.0

Michaelis constant:  $6.4 \times 10^{-4}\text{M}$  (pyruvate, pH 7.0)

Inhibitors: Ag<sup>2+</sup>, Hg<sup>2+</sup>, SH-reagents

Optimum pH: 5.0-7.0

Optimum temperature: 30-37°C

pH Stability: pH 5.0-9.0 (25°C, 48hr)

Thermal stability: below 45°C (pH 7.0, 15min)

### Applications

This enzyme is useful for enzymatic determination of numerous metabolites, e.g. ATP, ADP, glucose, creatinine, pyruvate, lactate and glycerol, and of enzyme activities, e.g. GPT, PK, and CPK when coupled with the related enzymes.

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