

D-LDH (L.M.)

D-Lactate dehydrogenase

D-Lactate : NAD⁺ oxidoreductase (EC 1.1.1.28)

from *Leuconostoc mesenteroides*

Reaction Equation



Specification

Specific Activity

IU/mg protein

Contaminants

Malate dehydrogenase

Myokinase

Pyruvate kinase

Glutamic-pyruvic transaminase^{**}

Glutamic-oxaloacetic transaminase^{**}

^{**}α-Hydroxyglutarate dehydrogenase activataion included.

Specifications

>1,000 units

<0.01%

<0.02%

<0.003%

<0.001%

<0.001%

Assay Procedure

I. Spectrophotometric Method

Wavelength ; 340 nm, Light path length ; 1 cm,
Temperature ; 25°C

Pipette the following reagents into a cuvette

3.00 mL Potassium phosphate buffer (0.1 mol/L, pH 7.0)

0.10 mL Li-pyruvate or Na-pyruvate (25.4 mmol/L)

0.05 mL NADH (10 mg/mL) dissolved in Tris
(10 mmol/L)

0.02 mL LDH (about 3 IU/mL)

II. Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{6.3 \cdot d \cdot v} = \text{IU/mL}$$

ΔA/min = The change in absorbance at 340 nm/minute

V = Total volume of reaction mixture (3.17 mL)

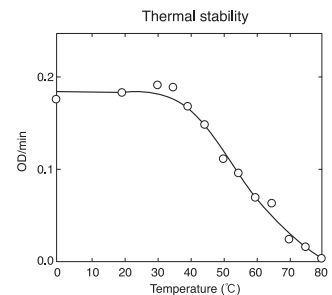
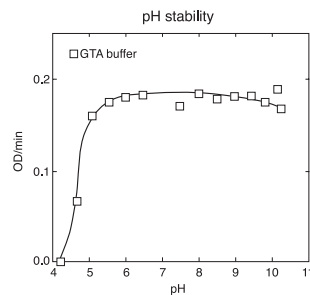
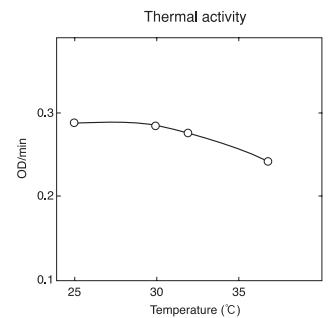
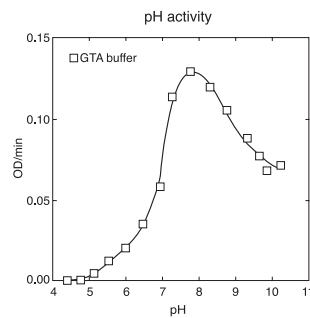
D = Enzyme dilution factor

6.3 = mM extinction coefficient of NADH
(L·mmol⁻¹·cm⁻¹)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and storage

Product Code : LDH-82

Ammonium sulfate suspension.....1°C ~ 10°C

IU per 1 ml suspension is approximately 10,000 units.

OYC No./Package

OYC No.	Package
46585082	10,000 units
46586082	50,000 units
46587082	100,000 units
46584902	Bulk

(Research reagent use only, not for medical use.)

