

# LDH

Liquid Reagent Kinetic determination. SFBC Store at 2-8 °C

# PRINCIPLE

Kinetic determination of the lactate dehydrogenase according to the SFBC recommendations by the following reaction:

 $\begin{array}{rrr} Pyruvate & + & NADH & + & H^+ & \\ & L-Lactate & + & NAD^+ \end{array}$ 

# **REFERENCE VALUES**

	25°C	30° C	37° C
Adult	< 240 U/l	< 330 U/l	< 480 U/l
Children	< 500	< 690	< 1000

It is recommended that each laboratory should assign its own normal range.

#### SAMPLES

Serum free of hemolysis or heparinized or EDTA plasma. LDH in sample is stable for 1 day at 2-8°C.

## REAGENTS

Concentration in the test A+	-B :
Tris buffer	50 mmol/l
NADH	0.18 mmol/l
Pyruvate	0.6 mmol/l

## PREPARATION OF WORKING REAGENT

Reagent A and B are ready to use. If a monoreagent procedure is preferred then the reagent must be mixed in the ration 4 parts of A to 1 part of B. The working reagent is stable for one month at 2-8°C

# PROCEDURE

Wavelength	340 nm			
Temperature	25°C/30°C/37° C			
Zero adjustment	Air or distilled water			
Cuvette	1 cm light path			
Method	Kinetic - decreasing			
If the absorbance of the working reagent is lower				
than 1.0 at 334 nm the reagent can not be used.				
Same 1a	20 I			

Sample20 μLWorking reagent1.0 ml

Mix and after a 1 minute incubation, measure the change of optical density per minute ( $\Delta$  O.D/min.) for 3 minutes.

#### CALCULATION

 $U/L = \Delta O.D/min x F$ 340 nm F = 8095

# LINEARITY

If there is not any kinetic or if  $\Delta$  O.D/min. exceeds 0.1 at 334-340 nm at 25°C, or if  $\Delta$  OD/min. exceeds 0.05 at 366 nm, repeat test using serum diluted 1/5 or 1/10 with physiological saline.

## SPECIFICATION

Bilirubin 0.15g/l, lipid 10g/l, glucose 3g/l and ascorbic acid 0.45g/l do not interfere with the assay up to the given levels

#### NOTES

Solution 1 contains sodium azide, avoid ingestion or contact with skin.

PRESENTATION				
50 ml	Cat No 2401	60 Tests		
180 ml	Cat No 2402	180 Tests		

## BIBLIOGRAPHY

Z. Klin. Chem. U. Klin. Biochem, 1970, 8,658, 1972,10, 182.

The following symbols are used on labels

- IVD
  - For in vitro diagnostic use

**Temperature limitation** 



Use day (last day of the month)

LOT

REF

Batch code

-

Code