CORALYZER
System Pack

LDH (P - L) Kit

(DGKC Method)

For the determination of LDH activity in serum.
(For Invitro Diagnostic Use Only)

Summary
LDH is found in many body tissues particularly heart, liver, skeletal muscle, kidney and RBC's. LDH is found in the form of isoenzymes based on their electophoretic mobility with each isoenzyme being primarily from different organs. Increased levels are found in myocardial infarction, pulmonary diseases, hepatic diseases, hemolytic anemias, renal diseases and muscular dystrophy.

Principle
Lactate dehydrogenase catalyzes the reduction of pyruvate with NADH to form NAD. The rate of oxidation of NADH to NAD is measured as a decrease in absorbance which is proportional to the LDH activity in the sample.

$$\text{Pyruvate} + \text{NADH} + H^+ \xrightarrow{\text{LDH}} \text{Lactate} + NAD^+$$

Normal reference values
Serum : 230 - 460 U/L at 37°C

It is recommended that each laboratory establish its own normal range representing its patient population.

Contents

Coralyzer 100 System Packs	**40 ml**	**50 ml**
L1 : Buffer Reagent	32 ml	2 x 20 ml
L2 : Starter Reagent	8 ml	10 ml

Coralyzer 200 System Packs	**40 ml**	**120 ml**	**200 ml**
L1 : Buffer Reagent	32 ml	4 x 24 ml	4 x 40 ml
L2 : Starter Reagent	8 ml	2 x 12 ml	4 x 10 ml

Storage / stability
Contents are stable at 2 - 8°C till the expiry mentioned.

Reagent preparation
Reagents are ready to use.

Sample material
Serum. Free from hemolysis. Total LDH is reported to be stable in serum for 1 - 3 days at 2 - 8°C.
Freezing inactivates the liver isoenzyme.

Calibration
Calibrator is recommended for calibration of this assay.

Linearity
This procedure is linear upto 2000 U/L at 37°C.

Note
RBC's have a very high LDH content and hence hemoysed samples should not be used.

References
Recommendations for the measurement of LDH in human serum at 30°C Ann. Biol. Chem. (1982) 40 : 87

Programming on	**CORALYZER 100/200**
Item	LDH
Full Name	LDH (P - L)
Test Method	Kinetic
Base Information	
Unit	U/L
Filter	340 nm
Sub. Filter	670 nm
Decimal	xx.xx
High pollute	No
Reagent Blank	
Blank Medium	Reagent
Blank Value	0
Blank Low	0
Blank High	2
Sample	
Sample Volume	6
Dilution Times	1
Range Setup	
Reagent	
Rgt. 1 Volume	240
Rgt. 2 Volume	60
Linearity	2000
Read data for check	
Assistant Start	NONE
Assistant End	NONE
Range Low	0
Range High	2
Test Point Start	19
Test Point End	29
Standard	
Number of standard	1
Factor	1
Correct Factor	1
Standard Cup	User Defined
Conc.	See Calibrator

Manufactured by :
Coral Clinical Systems
A Division of Tulip Diagnostics (P) Ltd.
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