PATHOZYME DIAGNOSTICS

LIQVIPATH LIPASE

(Enzymatic Colorimetric Method)

CAT NO.: LIP

Reagent kit for quantitative estimation of Lipase activity in Serum or Plasma.

DIAGNOSTIC SIGNIFICANCE:

Lipase determination is usually exclusively used for investigation of pancreatic disorders (e.g. pancreatitis). In acute pancreatitis lipase activity increase together with amylase activity but values stay high for longer time. For an accurate pancreatic disease diagnosis the use of both amylase and lipase is suggested.

PRINCIPLE:

The pancreatic lipase in the sample catalyze the hydrolyzation of substrate DLGGM* with the formation of methylresurofin, a chromogenic substance. Intensity of color formed is directly proportional to Lipase activity and measured at 580 nm.

*: 1,2-O-dilauryl-rac-glicerol-3-glutaric acid-(6'-methylresorufin) ester

SPECIMEN COLLECTION:

Serum and Heparine plasma with no hemolysis is essential. EDTA, Oxalate, Floride or citrate plasma led to decreased results.

KIT PRESENTATION:

Pack Size	1 X 12 ml	1 X 24 ml
R1-Lipase (Buffer Reagent)	1 X 10 ml	1 X 20 ml
R2-Lipase (Substrate Reagent)	1 X 02 ml	1 X 04 ml
Lipase Calibrator	1 No.	1 No.

WORKING REAGENT PREPARATION:

R1 – Lipase (Buffer Reagent) & R2 – Lipase (Substrate Reagent) are Ready To Use.

LIPASE CALIBRATOR

For value & reconstitution refer the Calibrator vial label. **After reconstitution Calibrator stable for 7 days at 2-8^{0}C.**

REAGENT STORAGE AND STABILITY:

All reagents are stable at 2-8^{0}C until the expiry date stated on the label.

ASSAY PARAMETERS:

Reaction	: Fix Time	Sample Volume	: 10 µl
Wavelength	: 580 nm	R1 + R2 Volume	: 1000 µl+200 µl
Flow Cell Temp.	: 37 ^{0}C	Calibrator Conc.	: As on vial
Initial Delay	: 60 Sec	Reaction Slope	: Increasing
Interval Time	: 60 Sec	Zero Setting	: Dist. Water
Read Time	: 60 Sec	Linearity	: 250
No. of Reading	: 01	Unit	: IU/L

PROCEDURE:

Addition Sequence	Calibrator	Test
R1 – Lipase (Buffer Reagent)	1000 µl	1000 µl
Lipase Calibrator	10 µl	--
Sample (Test)	--	10 µl
Mix and incubate for 60 second and then add		
R2 – Lipase (Substrate Reagent)	200 µl	200 µl

Mix immediately and read **first** absorbance of test exactly at 60 seconds and then, **second,** at an interval of 60 seconds at 580nm. Determine the change in absorbance (ΔAbs) and calculate the test results.

CALCULATION:

$$\text{Lipase Activity (IU/L)} = \frac{\Delta\text{Abs of Sample X Calibrator Conc.}}{\Delta\text{Abs of Calibrator}}$$

NORMAL VALUES:

Up to 60 IU/L at 37^{0}C

Each laboratory should establish its own reference range

LINEARITY

This method is linear up to **250 IU/L**. For values above 250 IU/L, dilute the sample suitably with 0.9 % saline, and repeat the assay. Apply correction due to dilution to arrive at a final result.

REFERENCES

1. Lorentz K. Lipase In: Thomas L, editor. Clinical laboratory diagnostics. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 95-7.

2. Tietz N, Shuey DF. Lipase in serum – the elusive enzyme: an overview. Clin Chem 1993; 39:746-56.

IFU No.: 034/CA | Rev. No.: 00/120723

Expiry Date | IVD In-Vitro Diagnostics Use | Storage | Mfg. Date | LOT Batch Number | REF Catalogue Number | See Package Insert

PATHOZYME DIAGNOSTICS

An ISO 9001:2015, ISO 13485:2016, CE & GMP Certified Company

A-115, Kagal Five Star MIDC, Kagal, Dist. Kolhapur-416 216.

Tel: 0231-2305072, Cell: +91 88058 67810, E-mail: contactus@pathozyme.com, Website: www.pathozyme.com