Triglycerides Test Kit

REF	Pack Size	Reagent
TGLLMB01	2 x 70	2 x 70ml

INTENDED USE
Triglyceride reagent is used for the quantitative estimation of Triglyceride concentration in human serum or plasma.

CLINICAL SIGNIFICANCE
Triglycerides are family of lipids absorbed from the diet and produced endogenously from carbohydrates and fatty acid. Measurement of triglyceride is important in the diagnosis and management of hyperlipidemia. These diseases can be genetic and secondary to other disorders including nephrosis, diabetes mellitus and endocrine disturbances. The National Cholesterol Education Program (NCEP)sites evidence that Triglyceride are an independent risk factor for atherosclerosis individuals with hypertension, obesity and diabetes are at greater risk than are those without these conditions. The adult treatment panel of the NCEP recommends that all adults 20 years of age and over should have fasting lipoprotein profile (Total Cholesterol/ LDL/HDL/Triglyceride) Once every 5 years to screen for coronary heart disease risk

METHOD: GPO – POD

TEST PRINCIPLE
Hydrolysis of Triglycerides leads to formation of Glycerol, further reactions of enzymes on glycerol gives red colored dye. Increase in triglycerides level are seen in cases of liver destruction due to hepatitis as well as cirrhosis. Higher the intensity of red color dye, higher will be the concentration of triglycerides in the sample.

Triglycerides $\xrightarrow{LPL}$ Fatty Acids + Glycerol

Glycerol + ATP $\xrightarrow{GK}$ Glycerol – 3- phosphate

Glycerol –3- phosphate $\xrightarrow{GPO}$ Dihydroxy--acetone phosphate + H_2O_2 + Chromogen Dye.

KIT CONTENTS AND COMPONENTS
Reagent : Buffered Enzymes

MATERIAL REQUIRD BUT NOT PROVIDED.
Fully Auto Biochemistry Analyzer: LM1016-400TPH.
Calibrator
Controls.

REAGENT PREPARATION, STORAGE AND STABILITY
The reagent is stable up to the end of the indicated date of expiry on the vial label, if stored at 2 to 8℃, protected from light and contamination is avoided. Do not freeze the reagent.

ON - BOARD REAGENT STABILITY-
On board reagent stability is 15 days.

SPECIMEN
Use fresh unhemolysed serum. serum or plasma should be separated from the cell as soon as possible. Use heparine or EDTA as anticoagulant. Serum/plasma stable for 7 days at 2 - 8°c.

APPLICATION For LM1016-400 TPH

Method	End point
Blank	Reagent blank
Primary filter	510
Secondary filter	No
R1 Volume	300
R1 Position	*
Incubation time (Sec)	522
R2 Volume	-
R2 Position	-
Incubation time (Sec)	-
Sample Volume	3
Read Time	27
Calibrator Concentration	As on vial label
Mix speed set	Middle
Unit	mg/dl
Decimal	2

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CALIBRATION
For calibration, it is recommended to use any multi calibrator.

CALCULATION
Calculations Fully automated systems automatically calculate the triglyceride concentration of each sample.

NORMAL VALUES
Normal up to 170 mg / dl

LIMITATIONS
If the value exceeds 1000mg/dl dilute the sample with 0.9% saline solution rerun and result multiplied by dilution factor.

SAFETY PRECAUTIONS AND WARNINGS
1.For in-vitro diagnostics use only.
2.Do not use the reagent after the expiration date printed on the kit.
3.Avoid reagents contamination.
4.These Reagent kits meant for laboratory/professional use only, not for Drug use.

QUALITY CONTROL AND CALIBRATION
It is recommended to perform internal quality control with assayed normal and assayed abnormal to confirm the validity of the test and assure the accuracy of patient result. Using the recommended multi calibrator, calibrate the assay.
1.When using a new reagent or lot
2.When QC values are out of range

PRECISION
Reproducibility was determined using quality control sera as shown below

	Intra run		Inter run	
Control	Level 1	Level 2	Level 1	Level 2
n	20	20	20	20
Mean (mg/dl)	171.9	81.6	171.8	81.8
SD	0.758	0.797	0.884	0.996
CV (%)	0.01	0.01	0.01	0.01

WASTE DISPOSAL
Reagents must be disposed off in accordance with local regulations.

REFERENCES
Tietz NW, ed. Clinical Guide to Laboratory Tests, 3rd ed. Philadelphia Pa: WB Saunders, 1995:22-24.
Lords Data File.

REF	Catalog No.		Instruction for use
LOT	Batch No.	IVD	*In-vitro* Diagnostics
	Manufacturer		Storage temperature
	Expiry Date		Manufacturing Date

IFU/TGL/03 Rev.: 00; Rev Date.: 22/07/2024

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