



# Triglycerides Test Kit

REF	Pack Size	Reagent 1	Reagent 2 (Std)
TGLLMS01	4x25 ml	4x25 ml	1x2 ml
TGLLMS02	4x50 ml	4x50 ml	1x2 ml
TGLLMS03	2X25 ml	2x25 ml	1x2 ml

Standard Volume	10 µl
Sample Volume	10 µl
Incubation	10 min. at 37°C or 20 min. at RT
Standard Concentration	200 mg/dl
Linearity	1000 mg/dl

## INTENDED USE

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

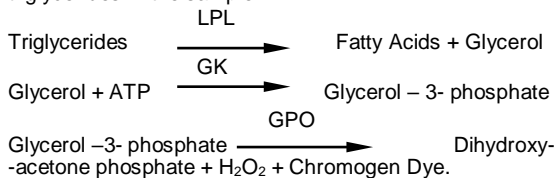
## CLINICAL SIGNIFICANCE

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.



## KIT CONTENTS AND COMPONENTS

Reagent 1 : Buffered Enzymes  
Reagent 2 : Standard (200 mg/dl)

## MATERIAL REQUIRED BUT NOT PROVIDED.

Laboratory instrumentation, spectrophotometer UV/VIS with thermostatic cuvette holder or clinical chemistry analyzer: semi-automated, calibrated micropipettes, glass or high-quality polystyrene cuvettes, test tubes/rack, heating bath, controls, saline.

## SAFETY PRECAUTIONS AND WARNINGS

- For in-vitro diagnostics use only.
- Do not pipette by mouth. Avoid contact with skin and eyes. If spilt thoroughly wash affected area with water.
- Do not use the reagent after the expiration date printed on the kit.

## 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°C, protected from light and contamination is avoided. Do not freeze the reagent.

## REAGENT DETERIORATION

Discard the reagent if absorbance exceeds 0.300 against distilled water at 505 nm.

## 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.

## PROGRAM

Reaction mode	End point
Wavelength	510 nm (505 – 560nm)
Light path	10 mm
Blanking	Reagent blanking
Reagent volume	1000 µl

## PROCEDURE

Test	Blank	Standard	Sample
Reagent	1000 µl	1000 µl	1000 µl
Standard	----	10 µl	----
Sample	----	----	10 µl

Mix & incubate for 20 min. at room temperature or for 10 min. at 37°C. Read absorbance of sample and standard against reagent blank. The method is linear up to 1000 mg/dl.

## CALCULATION

Concentration (C) of Triglycerides in the sample

$$C = \frac{\text{Absorbance of sample}}{\text{Absorbance of standard}} \times 200 \text{ mg/dl (conc. of std)}$$

## 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.

## 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 calibrator or the Standard included, calibrate the assay.

- When using a new reagent or lot
- When QC values are out of range

## WASTE DISPOSAL

This Product is made to be used in professional laboratories.

## HIGHLIGHT

- The Reagents are sensitive to light & higher temperature. Reagents may develop a slight pink coloration on ageing which does not interfere with the functionality of reagent.
- If the volume of the reagent is not sufficient to fill the cuvette, double all the specified volumes.
- Storage condition mentioned on the kit is to be used.
- Do not freeze or expose the reagents to higher temperature as it may affect the performance of the kit.
- Before testing bring the reagents to the RT.
- Avoid reagents contamination.
- Every time use new pipette-tips for pipetting out the reagents.
- These Reagent kits meant for laboratory/professional use only, not for Drug use.

## REFERENCE

Tietz N.W., ed. Clinical Guide to laboratory Tests, 3<sup>rd</sup> ed. Philadelphia, Pa: W.B. Saunders, 610 – 611.  
Lords Data File.

REF	Catalog No.		Contain Sufficient for test
LOT	Batch No.		Instruction for use
	Manufacturing Date		In-vitro Diagnostics
	Expiry Date		Storage temperature
	Manufacturer		

IFU/TGL/01 Rev.: 02; Rev Dated.: 22/07/2024