CORALYZER

System Pack

Triglycerides (SR) Kit

(GPO / PAP Method)

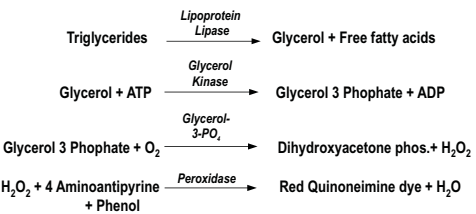
For the determination of Triglycerides in serum or plasma.
(For Invitro Diagnostic Use Only)

Summary

Triglycerides are a form of fatty acid esters. They are produced in the liver by binding glycerol and other fatty acids. They are transported by VLDL and LDL and act as a storage source for energy. Increased levels are found in hyperlipidemias, diabetes, nephrotic syndrome, hypothyroidism. Increased levels are risk factor for arteriosclerotic coronary disease and peripheral vascular disease. Decreased levels are found in malnutrition and hyperthyroidism.

Principle

Lipoprotein lipase hydrolyses triglycerides to glycerol and free fatty acids. The glycerol formed with ATP in the presence of glycerol kinase forms glycerol 3 phosphate which is oxidised by the enzyme glycerol phosphate oxidase to form hydrogen peroxide. The hydrogen peroxide further reacts with phenolic compound and 4-aminoantipyrine by the catalytic action of peroxidase to form a red coloured quinoneimine dye complex. Intensity of the colour formed is directly proportional to the amount of triglycerides present in the sample.



Normal reference values

Serum / Plasma	Suspicious	: 150 mg/dl and above
	Elevated	: 200 mg/dl and above

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

Contents

Coralyzer 100 System Packs	**90 ml**	**270 ml**
L1 : Triglycerides Reagent	3 x 30 ml	9 x 30 ml

Coralyzer 200 System Packs	**80 ml**	**240 ml**
L1 : Triglycerides Reagent	2 x 40 ml	6 x 40 ml

Storage / stability

Contents are stable at 2 - 8^{0}C till the expiry mentioned on the labels.
Upon storage the Triglycerides Reagent may develop a slight pink colour. This does not affect the performance of the test.

Reagent preparation

Reagents are ready to use.

Sample material

Serum, plasma. Triglycerides is reported to be stable in the sample for 5 days when stored at 2 - 8^{0}C.

Calibration

Calibrator is recommended for calibration of this assay.

Linearity

This procedure is linear upto 1000 mg/dl.

Note

Fasting samples of 12 to 14 hrs. are preferred. Fatty meals and alcohol may cause elevated results.
Patient should not drink alcohol for 24 hrs. before the test.

References

Trinder, P., (1969) Ann. Clin. Biochem. 6 : 24
Bucolo, G., David, H., (1973) Clin. Chem. 19 : 476
Fossati, P., Prencipe, L., (1982) Clin. Chem. 28 : 2077

Programming on	CORALYZER 100/200
Item	TGL - SR
Full Name	TRIGLYCERIDES
Test Method	End Point
Base Information	
Unit	mg/dl
Filter	510 nm
Sub. Filter	670 nm
Decimal	xx.xx
High pollute	No
Reagent Blank	
Blank Medium	Reagent
Blank Value	0
Blank Low	0
Blank High	0.25
Sample	
Sample Volume	3
Dilution Times	1
Range Setup	
Reagent	
Rgt. 1 Volume	300
Rgt. 2 Volume	0
Linearity	1000
Read data for check	
Assistant Start	NONE
Assistant End	NONE
Range Low	0
Range High	2
Test Point Start	17
Test Point End	18
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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