



Triglycerides

Version: 1

Edited by: John Stack, Gary Cline: Yale MMPC Analytical Core

Summary: Procedure used to determine the concentration of triglycerides in blood, serum, and plasma. Triglycerides are determined by coupling lipase, glucokinase, glycerol phosphate oxidase, and peroxidase to form a quinonemine dye which is measured at 500 nm.

Reagents and Materials:

Reagent/Material	Vendor	Stock Number
Triglyceride Reagent and Activator	Cliniqa	R85457
Multi Analyte Calibrator	Prolabs	R60010
Assayed Control Serum 1	Prolabs	R83082
Assayed Control Serum 2	Prolabs	R83083

Protocol: Analysis by automated system Cobas Mira Plus

- 1) Calibrate Cobas for Triglyceride analysis by running a multi-analyte calibrator and two control serum.
- 2) Sample handling as performed by Cobas Mira Plus.
 - a) Pipette 4 μ L of sample into cuvette.
 - b) Add 275 μ L of Triglyceride liquid reagent.
 - c) Incubate at 37°C for 10 minutes.
 - d) Absorbance is measured at 500nm.

Reagent Preparation:

Triglyceride Reagent: Add 40mL of Triglyceride Activator to the Reagent bottle.

Multi Analyte Calibrator: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 1: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 2: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.