

A simple, rapid enzymatic analysis for plasma or serum Triglycerides.

Bulletin Reference	TB – Triglyceride – Clinical – GMRD-195 – V.01
Order Code(s)	GMRD-195
Reagent Kit Size(s)	100 ml (140 analyser cycles)
Instruments	All GM7 series analysers
Samples	Plasma, serum
Sample Volume	25 µl
Analysis Time	20 - 25 seconds (from injection)
Linearity	5 mmol/L (ca. 440 mg/dl) for 20 µl samples; 10 mmol/L (ca. 880 mg/dl) for 10 µl samples
Reagent Stability	Shelf-life unopened: 9 months stored at 0 - 5°C. Shelf-life reconstituted: 3 - 4 weeks stored at 0 - 5°C..

## Principle

Plasma triglycerides are hydrolysed to glycerol and fatty acids in a rapid pre-reaction with Lipase (LP),



In the presence of glycerol kinase (GK), glycerol is phosphorylated by adenosine triphosphate (ATP) forming glycerol-3-phosphate (G-3-P) which in turn is oxidised by glycerol-3-phosphate oxidase (GPO) to dihydroxyacetone phosphate (DAP) and hydrogen peroxide,



Under the conditions of the assay, the above two reactions run concurrently in the reaction chamber and the rate of oxygen consumption is directly proportional to the triglycerides concentration.

