

The Triglyceride2 assay, an automated clinical chemistry method, measures triglycerides through enzymatic hydrolysis to glycerol and fatty acids. Glycerol is then phosphorylated, oxidized by glycerol phosphate oxidase (GPO), producing hydrogen peroxide (H_2O_2). This H_2O_2 reacts with 4-aminoantipyrine and TODB in a peroxidase-catalyzed reaction, creating a red dye. The dye's absorbance at 604 nm directly correlates to the sample's triglyceride concentration.