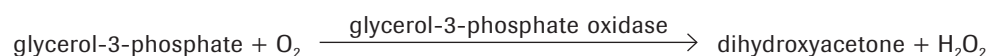
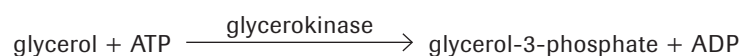
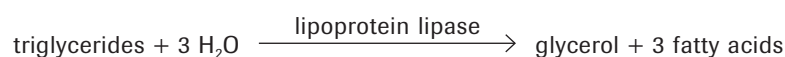


Triglycerides

Test principle: Enzymatic colorimetric



This method is based on the work by Wahlefeld using a lipoprotein lipase from microorganisms for the rapid and complete hydrolysis of triglycerides to glycerol followed by oxidation to dihydroxyacetone phosphate and hydrogen peroxide. The produced hydrogen peroxide then reacts with

4-aminoantipyrine and 4-chlorophenol under the catalytic action of peroxidase to form a red dye (Trinder endpoint reaction). The color intensity of the red dye formed is directly proportional to the triglyceride concentration and can be measured photometrically at 546 nm.

Proposed reagent composition →

Products are for further processing only.

Proposed reagent composition

Composition	Concentration	Catalog Number
Buffer (PIPES, pH 6.8)	50 mmol/l	10 239 500 103
4-Aminoantipyrine	>0.13 mmol/l	10 073 474 001
4-Chlorophenol	4.7 mmol/l	
ATP	>1.4 mmol/l	10 000 116 103
Mg ²⁺ (Mg-aspartate)	40 mmol/l	
Fatty alcohol polyglycol ether	0.65 %	
Potassium hexacyanoferrate (II)	1 µmol/l	
FAD	10 mg/l	10 154 032 103
Lipoproteinlipase (LPL)	>5 kU/l	11 145 991 103
Glycerokinase (GK)	>0.18 kU/l	10 539 937 103 or 11 499 530 103
Glycerophosphate oxidase (GPO)	>2.5 kU/l	11 582 003 103
Peroxidase (POD)	>0.1 kU/l	11 378 783 103
Detergent, such as Polidocanol Na-cholate	0.2 mmol/l	10 831 620 103 10 261 084 103
Stabilizer, such as Albumin	0.1 %	10 738 328 103
Preservative, such as Sodium azide		

- Add activators and stabilizers for GPO: Mg²⁺ (Mg-Aspartate), Albumin.
- Avoid inhibitors of GPO, such as chloride.
- Avoid inhibitors for GK, such as sulfate.
- The use of buffers where the pH can be adjusted with alkali helps to avoid the presence of interfering anorganic ions.
- Use ATP with a very low content of ADP and AMP.

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