

Lipoprotein lipase, Enzyme Activity

Catalog	Unit
TBP0034-10MG	10 mg
TBP0034-50MG	50 mg

Preparation and Specification

Appearance: Light brown amorphous powder, lyophilized

Activity: GradeIII 20U/mg-solid or more (containing approx. 80% of stabilizers)

Contaminants: Phosphatase $\leq 1.0 \times 10^{-3}\%$

Catalase $\leq 2.0 \times 10^{-2}\%$

NADH oxidase $\leq 1.0 \times 10^{-3}\%$

Cholesterol oxidase $\leq 2.0 \times 10^{-3}\%$

Stabilizers: Mg⁺⁺, Na-cholate, BSA

Triacylglycerol-protein acylhydrolase (EC 3.1.1.34)

Triglyceride + 3H₂O \longrightarrow Glycerol + 3Fatty acid

Properties

Stability: Stable at -20°C for at least Two years

Molecular weight: approx. 134,000

Isoelectric point: 5.95±0.05

Inhibitors: Hg⁺⁺, Ag⁺, ionic detergents

Optimum pH: 7.0-9.0

Optimum temperature: 45-50°C

pH Stability: pH 7.0-9.0 (25°C, 20hr)

Thermal stability: below 55°C (pH 7.0, 10min)

Applications

This enzyme is useful for enzymatic determination of triglyceride in serum when coupled with L- α - glycerophosphate oxidase and glycerol kinase. Usually, the reaction can be completed in 5 minutes at 37°C by using 2.5~3.0 units of the enzyme per test (3.0ml) at pH around 7.0.

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