

L- α -Glycerophosphate Oxidase

Catalog	Unit
TBP0250-100U	100 U
TBP0250-500U	500 U

Catalysis

L- α -Glycerophosphate + O₂ -----> Dihydroxyacetone phosphate + H₂O₂

Preparation and Specification

Synonyms: Sn-Glycerol-3-phosphate: oxygen 2-oxidoreductase, L-Glycerol 3-phosphate Oxidase, GPO, EC 1.1.3.21

Appearance: Yellow powder, lyophilized

Activity: 35 U/mg

Contaminants: Lactase oxidase activity $\leq 3 \times 10^{-3}\%$

Catalase activity $\leq 4 \times 10^{-3}\%$

ATPase activity $\leq 6 \times 10^{-3}\%$

Characteristics

Molecular weight: 67,000

Isoelectric point: 4.4

K_m: 1.18×10^{-4} M (pH 7.0, 37°C)

Optimum pH: 7.0

pH stability: 5.0-7.0 (37°C, 30 min)

Optimum temperature: 45°C

Thermal stability: up to 40°C (pH 7.0, 10 min)

Inhibitors: Ag⁺, Hg²⁺

Stabilizers: FAD, (NH₄)₂SO₄

Storage: 24 months from the date of analysis when stored at -20°C in a dry place under sealed conditions.

Applications

Used for the enzymatic determination of triglyceride in serum by coupling with lipoprotein lipase and glycerol kinase.

For research use only