Creative Enzymes®

Chemically modified Glycerol-3-phosphate Oxidase from E. coli

Cat. No. DIA-287

Lot. No. (See product label)

Introduction

Description	Recombinant oxidoreductase that catalyzes the interconversion of glycerol 3-phosphate to dihydroxyacetone phosphate. Take advantage of the enhanced liquid stability of this enzyme. Rely on the proven diagnostic quality of this product.
Applications	Use Glycerol-3-phosphate Oxidase in diagnostic tests for the determination of triglycerides together with Glycerol Kinase and Lipoprotein Lipase.
Synonyms	glycerol-3-phosphate oxidase; sn-glycerol-3-phosphate: oxygen 2-oxidoreductase; glycerol phosphate oxidase; glycerol-1-phosphate oxidase; glycerol phosphate oxidase; L-alpha-glycerophosphate oxidase; alpha-glycerophosphate oxidase; L-alpha-glycerol-3-phosphate oxidase; GPO

Product Information

Source	E. coli
Appearance	Green yellow amorphous lyophilizate
Molecular Weight	75 kD (SDS-PAGE); 74 kD (gel filtration, Sephadex G 150)
Activity	>10 U/mg lyophilizate (+37°C, L-α-glycerol phosphate); Specific activity (+25°C): >40 U/mg protein
Contaminants	Cholesterol oxidase: <0.001 Lactate oxidase: <0.002 Uricase: <0.05
Isoelectric point	~4.2
pH Stability	6.5-8.5
Optimum pH	8.0-8.5
Michaelis Constant	K-phosphate buffer, 0.1 mol/l; pH 7.5: 1.36 x 10-2 mol/l (o-dianisidine assay) Tris buffer, 0.1 mol/l; pH 7.6: 2.90 x 10-3 mol/l (o-dianisidine assay) Tris buffer, 0.1 mol/l; pH 8.1: 1.40 x 10-3 mol/l (PAP assay)
Specificity	Glycerol phosphate oxidase reacts highly specific with L-α-glycerol phosphate.
Inhibitors	Ag, Hg-salts and SDS

Storage and Shipping Information

Stability	At +2 to +8°C within specification range for 12 months. Store dry.