

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; 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 $>10 \text{ U/mg lyophilizate (+37°C, L-α-glycerol phosphate); Specific activity (+25°C):}$

>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

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mol/l; pH 8.1: 1.40 x 10-3 mol/l (PAP assay)

 $\textbf{\textit{Specificity}} \qquad \qquad \text{Glycerol phosphate oxidase reacts highly specific with L-α-glycerol phosphate}.$

Inhibitors Ag, Hg-salts and SDS

Storage and Shipping Information

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