

## Glycerol-3-Phosphate Dehydrogenase from E. coli, Recombinant

Cat. No. NATE-1904

Lot. No. (See product label)

## Introduction

**Description** α-glycerophosphate dehydrogenase catalyzes the conversion of dihydroxyacetone to glycerol phosphate.

Applications The enzyme is useful for enzymatic determination of glycerol and triglyceride when coupled with

glycerokinase.

**Synonyms** α-glycerol phosphate dehydrogenase (NAD); α-glycerophosphate dehydrogenase (NAD); glycerol 1-

phosphate dehydrogenase; glycerol phosphate dehydrogenase (NAD); glycerophosphate dehydrogenase

(NAD); hydroglycerophosphate dehydrogenase; L- $\alpha$ -glycerol phosphate dehydrogenase; L- $\alpha$ -glycerophosphate dehydrogenase; L-glycerol phosphate dehydrogenase; L-glycerophosphate dehydrogenase; NAD- $\alpha$ -glycerophosphate dehydrogenase; NAD-dependent glycerol phosphate dehydrogenase; NAD-dependent glycerol-3-phosphate dehydrogenase; NAD-L-glycerol-3-phosphate dehydrogenase; NAD-linked glycerol 3-phosphate dehydrogenase; NADH-dihydroxyacetone phosphate

reductase; glycerol-3-phosphate dehydrogenase (NAD); EC 1.1.1.8; 9075-65-4; α-GDH

## **Product Information**

Source E. coli

Appearance Lyophilized

**EC Number** EC 1.1.1.8

*CAS No.* 9075-65-4

Molecular

Weight

ca. 73,600; Subunit molecular weight : ca. 36,800.

more than 7 U/mg protein

Specific Activity

pH Stability

**Optimum** 

9

6.5 - 10.0

рΗ

No detectable decrease in activity up to 80 °C.

Thermal stability

(90 mM Bicine buffer pH 9.0, at 37 °C) Glycerol-3-phosphate: 0.119 mM; NAD+: 0.036 mM.

Michaelis Constant

Unit

One unit of activity is defined as the amount of G3PDH that forms 1 µmol of NADH per minute at 37 °C.

**Definition** 

Reaction Glycerol-3-phosphate + NAD+ ←→ Dihydroxyacetone 3-phosphate + NADH+ H+

## Storage and Shipping Information

**Storage** Stable at -20 °C for at least one year.

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