Creative Enzymes®

# Native Aerococcus viridans Glycerol 3-phosphate Oxidase

*Cat. No. NATE-0314*

*Lot. No.* (See product label)

## Introduction

**Description** In enzymology, a glycerol-3-phosphate oxidase (EC 1.1.3.21) is an enzyme that catalyzes the chemical reaction:sn-glycerol 3-phosphate + O2↔ glycerone phosphate + H2O2. Thus, the two substrates of this enzyme are sn-glycerol 3-phosphate and O2, whereas its two products are glycerone phosphate and H2O2. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with oxygen as acceptor. This enzyme participates in glycerophospholipid metabolism. It employs one cofactor, FAD.

**Synonyms** EC 1.1.3.21; glycerol phosphate oxidase; glycerol-1-phosphate oxidase; glycerol phosphate oxidase; L-α-glycerophosphate oxidase; α-glycerophosphate oxidase; L-α-glycerol-3-phosphate oxidase; Glycerol 3-phosphate Oxidase; 9046-28-0; sn-Glycerol 3-phosphate:oxygen 2-oxidoreductase; L-Glycerol 3-phosphate Oxidase; GPO

## Product Information

**Source** Aerococcus viridans

**Form** Lyophilized powder containing sucrose

**EC Number** EC 1.1.3.21

**CAS No.** 9046-28-0

**Activity** > 70 units/mg solid

**Unit Definition** One unit will oxidize 1.0 μmole of L-glycerol 3-phosphate to dihydroxyacetone phosphate with the formation of H2O2 per min at 37°C, at pH 8.1.

## Storage and Shipping Information

**Storage** −20°C