Creative Enzymes®

Native Nematoloma frowardii Manganese Peroxidase

Cat. No. NATE-0453

Lot. No. (See product label)

Introduction

Description Manganese peroxidase (MnP) is a hemecontaining glycoprotein that is produced by ligninolytic basidiomycetes. It requires hydrogen peroxide as an oxidant. MnP oxidizes Mn2+ to Mn3+. Mn3+ oxidizes phenolic rings to phenoxy radicals which results in the decomposition of various compounds.

Applications Manganese peroxidase (MnP) is used to oxidize Mn2+ to Mn3+ in the presence of hydrogen peroxide. It is used for the biodegreadation of macromolecular substances such as lignin and humic substances

Synonyms manganese peroxidase; peroxidase-M2; Mn-dependent (NADH-oxidizing) peroxidase; EC 1.11.1.13; 114995-15-2; MnP

Product Information

Source Nematoloma frowardii

EC Number EC 1.11.1.13

CAS No. 114995-15-2

Activity > 4.2 units/mg

Unit Definition 1 U corresponds to the amount of enzyme which oxidizes 1 μmol Mn2+ to Mn3+ per minute at pH 4.5 and 25°C (in the presence of H2O2).

Usage and Packaging

Package Bottomless glass bottle. Contents are inside inserted fused cone.

Storage and Shipping Information

Storage −20°C