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