

## 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 Mn<sup>2+</sup> to Mn<sup>3+</sup>. Mn<sup>3+</sup> oxidizes phenolic rings to phenoxy radicals which results in the decomposition of various compounds.

**Applications** Manganese peroxidase (MnP) is used to oxidize Mn<sup>2+</sup> to Mn<sup>3+</sup> in the presence of hydrogen peroxide. It is used for the biodegradation 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 Mn<sup>2+</sup> to Mn<sup>3+</sup> per minute at pH 4.5 and 25°C (in the presence of H<sub>2</sub>O<sub>2</sub>).

### Usage and Packaging

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

### Storage and Shipping Information

**Storage** -20°C