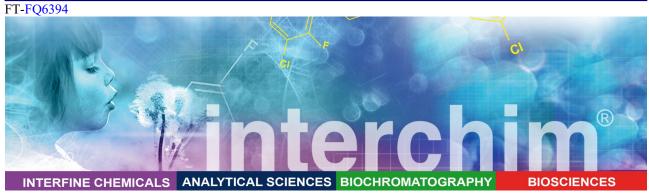
## InterBioTech



# Manganese peroxidase

Used to oxidize manganese. It may be used to study wound healing.

#### **Product Description**

**Catalog #:** FQ6394, 10mg

 $2 \text{ Mn(II)} + 2 \text{ H}^+ + \text{ H}_2\text{O}_2 \longrightarrow 2 \text{ Mn(III)} + 2 \text{ H}_2\text{O}$ 

Manganese Peroxidase

Name: Manganese peroxidase

Manganese-dependent lignin peroxidase; MnP;

Peroxidase, manganese CAS: [114995-15-2]

Activity: > 10U/g

Storage: Powder -20°C

#### **Technical and Scientific Information**

Manganese peroxidase is from white-rot fungus (Phanerochaete chrysosporium). It is used to oxidize manganese and catalyzes the oxidation of  $Mn^{2+}$  to  $Mn^{3+}$ .  $Mn^{3+}$  is then in complex with oxalate, which is able to oxidize lignin. Manganese peroxidase from Phanerochaete chrysosporium binds 2 calcium ions per subunit. It binds 1 heme B (iron-protoporphyrin IX) group per subunit. One unit of Manganese peroxidase corresponds to the amount of enzyme, which oxidizes 1  $\mu$ mole  $Mn^{2+}$  per minute to  $Mn^{3+}$  at pH 4.5 and 25°C.

#### References

[1]. Santacruz-Juárez E. et al., Fungal enzymes for the degradation of polyethylene: Molecular docking simulation and biodegradation pathway proposal, Journal of Hazardous Materials, Volume 411, 5 June 2021, 125118

### **Ordering information**

Catalog size quantities and prices may be found at <a href="http://www.interchim.com">http://www.interchim.com</a>.

Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information

Hotline: +33(0)4 70 03 73 06 - <u>Interbiotech@interchim.com</u>

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