

versatile peroxidase

Cat. No. EXWM-0497

Lot. No. (See product label)

Introduction

Description

A hemoprotein. This ligninolytic peroxidase combines the substrate-specificity characteristics of the two other ligninolytic peroxidases, EC 1.11.1.13, manganese peroxidase and EC 1.11.1.14, lignin peroxidase. Unlike these two enzymes, it is also able to oxidize phenols, hydroquinones and both low- and high-redox-potential dyes, due to a hybrid molecular architecture that involves multiple binding sites for substrates.

Synonyms

VP; hybrid peroxidase; polyvalent peroxidase; reactive-black-5:hydrogen-peroxide oxidoreductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.11.1.16

CAS No.

42613-30-9, 114995-15-2

Reaction

(1) 1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol + H₂O₂ = 4-hydroxy-3-methoxybenzaldehyde + 2-methoxyphenol + glycolaldehyde + H₂O; (2) 2 manganese(II) + 2 H⁺ + H₂O₂ = 2 manganese(III) + 2 H₂O

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.