

## dye decolorizing peroxidase

Cat. No. EXWM-0500

Lot. No. (See product label)

### Introduction

**Description** Heme proteins with proximal histidine secreted by basidiomycetous fungi and eubacteria. They are similar to EC 1.11.1.16 versatile peroxidase (oxidation of Reactive Black 5, phenols, veratryl alcohol), but differ from the latter in their ability to efficiently oxidize a number of recalcitrant anthraquinone dyes, and inability to oxidize Mn(II). The model substrate Reactive Blue 5 is converted with high efficiency via a so far unique mechanism that combines oxidative and hydrolytic steps and leads to the formation of phthalic acid. Bacterial TfuDyP catalyses sulfoxidation.

**Synonyms** DyP; DyP-type peroxidase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.11.1.19

**Reaction**  $\text{Reactive Blue 5} + 2 \text{H}_2\text{O}_2 = \text{phthalate} + 2,2'\text{-disulfonyl azobenzene} + 3\text{-(4-amino-6-chloro-1,3,5-triazin-2-yl)aminobenzenesulfonate} + 2 \text{H}_2\text{O}$

**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.