Creative Enzymes®

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	Reactive Blue 5 + 2 H2O2 = phthalate + 2,2'-disulfonyl azobenzene + 3-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]benzenesulfonate + 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.