Creative Enzymes®

Native Caldariomyces fumago Chloroperoxidase

Cat. No. NATE-0156

Lot. No. (See product label)

Introduction

Description	Chloroperoxidase (CPO) is a 42 kDa Da extracellular heme glycoenzyme containing ferriprotoporphyrin IX as the prosthetic group. CPO is secreted from fungus and exhibits a broad spectrum of chemical reactivities. It is a peroxide-dependent chlorinating enzyme. It also catalyzes peroxidase-, catalase-and cytochrome P450-type reactions of dehydrogenation, H2O2 decomposition and oxygen insertion, respectively. The enzyme has magnetic and spectroscopic properties similar to that of cyctochrome P-450. CPO from the fungus Caldariomyces fumago has the capacity to chlorinate aromatic hydrocarbons, including polycyclic aromatic hydrocarbons (PAHs).
Applications	A useful alternative to lactoperoxidase for 131I ion labeling studies, for bromination of proteins, and for Cl labeling of macromolecules in long-term isolation procedures.
Synonyms	Chloroperoxidase; CPO; Vanadium haloperoxidase; EC 1.11.1.10; 9055-20-3; Chloride Peroxidase; Chloride:hydrogen-peroxide oxidoreductase

Product Information

Source	Caldariomyces fumago
Form	buffered aqueous suspension. Purified suspension in 0.1 M sodium phosphate solution, pH approx. 4.5
EC Number	EC 1.11.1.10
CAS No.	9055-20-3
Activity	1,000-2,000 units/mg protein (E1%/280); > 3,000 units/mL; >10,000 U/mL
Unit Definition	One unit will catalyze the conversion of 1.0 µmole of monochlorodimedon to dichlorodimedon per min at pH 2.75 at 25°C in the presence of potassium chloride and H2O2.

Storage and Shipping Information

Storage	2-8°C