

## 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, H<sub>2</sub>O<sub>2</sub> decomposition and oxygen insertion, respectively. The enzyme has magnetic and spectroscopic properties similar to that of cytochrome 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 <sup>131</sup>I 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 H<sub>2</sub>O<sub>2</sub>.

### Storage and Shipping Information

**Storage** 2-8°C