

## myeloperoxidase

Cat. No. EXWM-0513

Lot. No. (See product label)

### Introduction

#### Description

Contains calcium and covalently bound heme (proximal ligand histidine). It is present in phagosomes of neutrophils and monocytes, where the hypochlorite produced is strongly bactericidal. It differs from EC 1.11.1.10 chloride peroxidase in its preference for formation of hypochlorite over the chlorination of organic substrates under physiological conditions (pH 5-8). Hypochlorite in turn forms a number of antimicrobial products (Cl<sub>2</sub>, chloramines, hydroxyl radical, singlet oxygen). MPO also oxidizes bromide, iodide and thiocyanate. In the absence of halides, it oxidizes phenols and has a moderate peroxygenase activity toward styrene.

#### Synonyms

MPO; verdoperoxidase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.11.2.2

#### Reaction

$\text{Cl}^- + \text{H}_2\text{O}_2 + \text{H}^+ = \text{HClO} + \text{H}_2\text{O}$

#### 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.