Creative Enzymes®

Native Human Myeloperoxidase A+B

Cat. No. NATE-0459

Lot. No. (See product label)

Introduction

Description	Myeloperoxidase (MPO) is a peroxidase enzyme that in humans is encoded by the MPO gene on chromosome 17. MPO is most abundantly expressed in neutrophil granulocytes (a subtype of white blood cells), and produces hypohalous acids to carry out their antimicrobial activity. It is a lysosomal protein stored in azurophilic granules of the neutrophil and released into the extracellular space during degranulation. MPO has a heme pigment, which causes its green color in secretions rich in neutrophils, such as pus and some forms of mucus.
Synonyms	MPOAB; MPOA+B; Myeloperoxidase A+B

Product Information

Species	Human
Source	Human Neutrophils
Form	Liquid
Purity	> 98% (SDS-PAGE)
Activity	Typically > 1,000 U/mL
Pathway	C-MYB transcription factor network, organism-specific biosystem; Folate Metabolism, organism-specific biosystem; IL23-mediated signaling events, organism-specific biosystem; Phagosome, organism-specific biosystem; Phagosome, conserved biosystem; Selenium Pathway, organism-specific biosystem; Transcriptional misregulation in cancer, organism-specific biosystem
Function	chromatin binding; heme binding; heparin binding; metal ion binding; oxidoreductase activity; peroxidase activity
Unit Definition	One unit of Myeloperoxidase will catalyze the consumption of one micromole of hydrogen peroxide and the production of ¼ micromole of tetraguaiacol per minute at pH 7.0 and 25°C.

Storage and Shipping Information

Storage	2-8°C