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Datasheet for ABIN7505581

**Myeloperoxidase Protein (MPO) (AA 49-745) (His tag)**

## Overview

Quantity:	100 µg
Target:	Myeloperoxidase (MPO)
Protein Characteristics:	AA 49-745
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myeloperoxidase protein is labelled with His tag.

## Product Details

Sequence:	Ala49-Ser745
Characteristics:	Recombinant Human Myeloperoxidase is produced by our Mammalian expression system and the target gene encoding Ala49-Ser745 is expressed with a 10His tag at the C-terminus.
Purity:	>95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	<1.0 EU per µg of the protein as determined by the LAL method.

## Target Details

Target:	Myeloperoxidase (MPO)
Alternative Name:	Myeloperoxidase ( <a href="#">MPO Products</a> )
Background:	Background: Myeloperoxidase (MPO) is a heme-containing enzyme belonging to the XPO subfamily of peroxidases. It is an abundant neutrophil and monocyte glycoprotein that catalyzes the hydrogen peroxide-dependent conversion of chloride, bromide, and iodide to

## Target Details

multiple reactive species. Post-translational processing of MPO involves the insertion of a heme moiety and the proteolytic removal of both a propeptide and a 6 aa internal peptide. This results in a disulfide-linked dimer composed of a 60 kDa heavy and 12 kDa light chain that associate into a 150 kDa enzymatically active tetramer. The tetramer contains two heme groups and one disulfide bond between the heavy chains. Alternate splicing generates two additional isoforms of MPO, one with a 32 aa insertion in the light chain, and another with a deletion of the signal sequence and part of the propeptide. Human and mouse MPO share 87 % aa sequence identity. MPO activity results in protein nitrosylation and the formation of 3-chlorotyrosine and dityrosine crosslinks. MPO is also associated with a variety of other diseases, and inhibits vasodilation in inflammation by depleting the levels of NO. Serum albumin functions as a carrier protein during MPO movement to the basolateral side of epithelial cells. MPO is stored in neutrophil azurophilic granules. Upon cellular activation, it is deposited into pathogen-containing phagosomes.

Synonym: Myeloperoxidase, MPO

Molecular Weight: 80.3 kDa

UniProt: [P05164](#)

Pathways: [Chromatin Binding](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, pH 8.0.

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date: 12 months