

## Summary

Name	Myeloperoxidase/MPO
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/µg as determined by LAL test.
Construction	Recombinant Mouse Myeloperoxidase is produced by our Mammalian expression system and the target gene encoding Met16-Thr718 is expressed with a 10His tag at the C-terminus.
Accession #	P11247
Host	Human Cells
Species	Mouse
Predicted Molecular Mass	81.1 KDa
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SDS-PAGE** image

kDa	MK R
170 130	=
95	survey billion is
72 55	_
43	
34	
26	Constant in the second



## Background

Alternative Names Myeloperoxidase; MPO

Background

Myeloperoxidase (MPO) is a hemecontaining enzyme belonging to the XPO subfamily of peroxidases. It is an abundant neutrophil and monocyte glycoprotein that catalyzes the hydrogen peroxidedependent conversion of chloride, bromide, and iodide to multiple reactive species. MPO activity results in protein nitrosylation and the formation of 3-chlorotyrosine and dityrosine crosslinks. Modification of ApoB100, as well as the lipid and cholesterol components of LDL and HDL, promotes the development of atherosclerosis. 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 pathogencontaining phagosomes. While mice lacking MPO are impaired in clearing select microbial infections,MPO deficiency in humans does not necessarily result in heightened susceptibility to infections.

## Note

For Research Use Only, Not for Diagnostic Use.