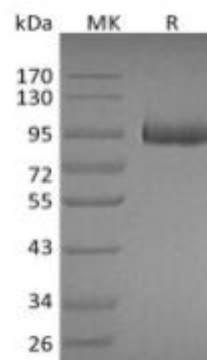


Recombinant Mouse MPO

Catalog#:P01449 Derived from Human Cells

DESCRIPTION	<p>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.</p> <p>Accession#: P11247</p> <p>Known as: Myeloperoxidase; MPO</p>
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at $<-20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at $<-20^{\circ}\text{C}$ for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100μg/ml.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass:81.1kDa AP Mol Mass:93kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.</p>
BACKGROUND	<p>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 peroxide dependent 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 pathogen-containing 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.</p>
SDS-PAGE	 <p>The SDS-PAGE gel shows a single prominent band in lane R at approximately 93 kDa, corresponding to the expected molecular weight of recombinant mouse MPO. Lane MK is a molecular weight marker with bands at 170, 130, 95, 72, 55, 43, 34, and 26 kDa.</p>