

## 32-8968: Recombinant Mouse Myeloperoxidase/MPO (C-10His)

**Gene :** Mpo  
**Gene ID :** 17523  
**Uniprot ID :** P011247

### Description

Source: Human Cells.  
MW :81.1kD.

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. 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 peroxidase-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.

### Product Info

<b>Amount :</b>	10 µg / 50 µg
<b>Purification :</b>	Purity is >95%. Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
<b>Content :</b>	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 peroxidase-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.
<b>Storage condition :</b>	Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
<b>Amino Acid :</b>	MLQTSNGATPALLGEVENSVVLSCMEEAKQLVDRAYKERRESIKRSLQSGSASPTTELLFYFKQPVAGTRTAVRA ADYLHVALDLLKRLQPLWPRPFNVTDVLTPAQLNLLSVSSGCAYQDVRVTCPPNDKYRTITGHCNNRRSPTLG ASNRAFRVRLPAEYEDGVSMFPGWTPGVNRNGFKVPLARQVSNAIVRFPNDQLTKDQERALMFMQWGQFLD HDITLTPEPATRFSFFTGLNCETSCLQPPCFPLKIPNDPRIKNQKDCIPFFRSCPACTRNNITIRNQINALTSFVD ASGVYGSSEDLARKLRNLNQLGLLAINTRFQDNGRALMPFDSLHDDPCLLTNRSARIPCFGLAGDMRSSEMP TSMHTLVREHNRLATQLKRLNPRWNGEKLYQEARKIVGAMVQIITYRDYLPVLGPAAMKKYLPQYRSYNSV DPRIANVFTNAFRYGHITLQPFMRLNNQYRPTGPNPRVPLSKVFFASWRVVLGGIDPILRGLMATPAKLNRQN QIVVDEIRERLFEQVMRIGLDLPALNMQRSDHGLPGYNARWRFCGLPQPSTVGELGTVLKNLELARKLMAQY GTPNNIDIWMGGVSEPLEPNRVRGQLLACIGTQFRKLDRGDRFWWENPGVFSKQQRQALASISLPRIICDNT GITTVSKNNIFMSNTYPRDFVSCNTLPKLNLTWSKETHHHHHHHHHHH

## Application Note

**Endotoxin** : Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

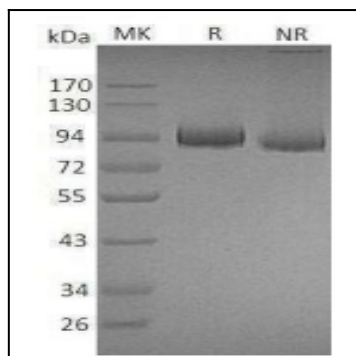


Figure 1: Recombinant Mouse MPO ran on SDS-Page under reducing and non-reducing conditions.