

## Recombinant Mouse MPO

Catalog No: CS87

**Description** 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.

**Source** Human Cells

**Alternative name** Myeloperoxidase; MPO

**Accession No.** P011247

**Quality Control** Purity: >95% as determined by reducing SDS-PAGE.  
Endotoxin: <1.0 EU per  $\mu$ g

**Formulation** Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH7.4..

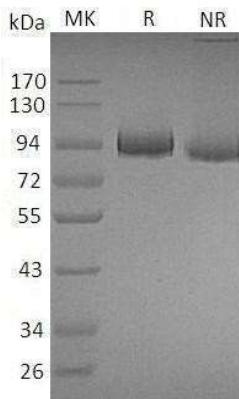
**Reconstitution** It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml.  
Dissolve the lyophilized protein in distilled water.  
Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Shipping** The product is shipped at ambient temperature.  
Upon receipt, store it immediately at the temperature listed below.

**Storage** 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.  
Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

**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 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.

### SDS-PAGE



R. Reducing sample

NR. Non-reducing sample