

**Myeloperoxidase Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1249a****Specification**

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**Myeloperoxidase Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P05164</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

**Description**

Myeloperoxidase (MPO) is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of 2 light chains and 2 heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of neutrophils.

**Immunogen**

Purified recombinant fragment of MPO (aa1-193) expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**Myeloperoxidase Antibody - Additional Information**

**Gene ID** 4353

**Other Names**

Myeloperoxidase, MPO, 1.11.2.2, Myeloperoxidase, 89 kDa myeloperoxidase, 84 kDa myeloperoxidase, Myeloperoxidase light chain, Myeloperoxidase heavy chain, MPO

**Dilution**

WB~~1/500 - 1/2000

E~~N/A

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Myeloperoxidase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Myeloperoxidase Antibody - Protein Information**

**Name** MPO ([HGNC:7218](#))

#### Function

Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity (PubMed:[9922160](http://www.uniprot.org/citations/9922160)). Mediates the proteolytic cleavage of alpha-1-microglobulin to form t-alpha-1-microglobulin, which potently inhibits oxidation of low-density lipoprotein particles and limits vascular damage (PubMed:[25698971](http://www.uniprot.org/citations/25698971)).

#### Cellular Location

Lysosome.

### Myeloperoxidase Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Myeloperoxidase Antibody - Images

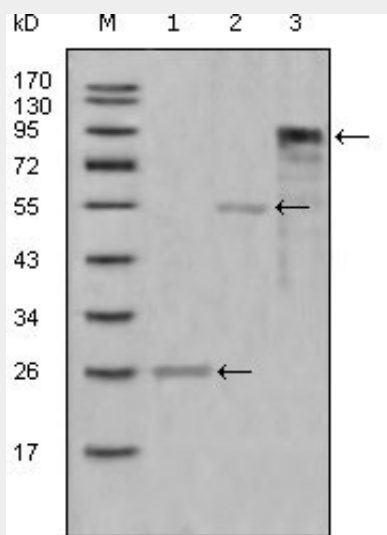


Figure 1: Western blot analysis using MPO mouse mAb against truncated Trx-MPO recombinant protein (1), truncated MBP-MPO (aa1-193) recombinant protein (2) and truncated MPO(aa165-745)-hlgGfc transfected CHO-K1 cell lysate(3).

### Myeloperoxidase Antibody - References

1. J Pediatr Hematol Oncol. 2007 May;29(5):293-7.
2. PLoS ONE. 2008 Jun 30;3(7):e2816.