

## Basic Information

Product Name	Anti-MPO Antibody	
Gene Name	MPO	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Myeloperoxidase recombinant protein (Position:S406-S745). Human Myeloperoxidase shares 90% amino acid (aa) sequence identity with mouse Myeloperoxidase.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	60-65 kDa,80-90 kDa	
Dilution Ratios	Western blot (WB): 1:1000-5000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

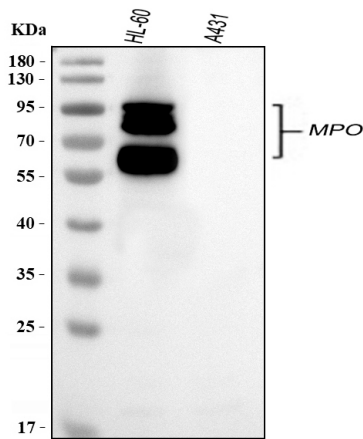
## Background Information

Myeloperoxidase (MPO) is a mammalian phagocyte hemoprotein thought to primarily mediate host defense reactions. It is abundantly expressed in neutrophils and secreted during their activation. Myeloperoxidase is part of the host defense system of human polymorphonuclear leukocytes, responsible for microbicidal activity against a wide range of organisms. It is located in the nucleus as well as in the cytoplasm. Intranuclear MPO may help to protect DNA against damage resulting from oxygen radicals produced during myeloid cell maturation and function. The standard product used in this kit is the product of gene recombination, consisting of 697(A49-S745) amino acids with the molecular mass of 80KDa.

## Reference

Anti-MPO Antibody被引用在12文献中。

## Selected Validation Data

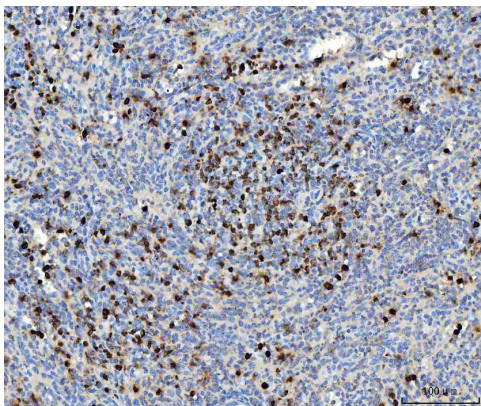


Western blot analysis of MPO using anti-MPO antibody (PB9057). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HL-60 whole cell lysates,

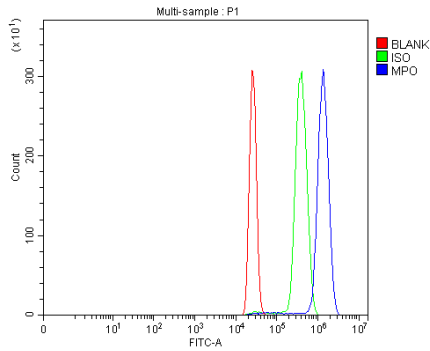
Lane 2: human A431 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MPO antigen affinity purified polyclonal antibody (PB9057) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for MPO at approximately 60-65 kDa, 80-90 kDa. The expected band size for MPO is at 84 kDa.



IHC analysis of MPO using anti-MPO antibody (PB9057).

MPO was detected in a paraffin-embedded section of human spleen tissue. The tissue section was incubated with rabbit anti-MPO Antibody (PB9057) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of HL-60 cells using anti-MPO antibody (PB9057). Overlay histogram showing HL-60 cells stained with PB9057 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MPO Antibody (PB9057) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.