

For Research Use Only

# Mpo Recombinant antibody

Catalog Number: 84436-5-RR



## Basic Information

<b>Catalog Number:</b> 84436-5-RR	<b>GenBank Accession Number:</b> AAR99349	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 17523	<b>CloneNo.:</b> 241839C11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P11247	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:125-1:500 IF-P 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> myeloperoxidase	
	<b>Calculated MW:</b> 81KD	
	<b>Observed MW:</b> 43 kDa, 59 kDa, 90 kDa	

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Species Specificity:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : HL-60 cells, mouse spleen tissue, rat spleen tissue

IHC : mouse spleen tissue,

IF-P: mouse spleen tissue,

## Background Information

The MPO gene encodes myeloperoxidase, a lysosomal hemoprotein located in the azurophilic granules of polymorphonuclear (PMN) leukocytes and monocytes. In response to stimulation, MPO is activated into a transient intermediate with potent antimicrobial oxidizing abilities (PMID:17650507). The mRNA is translated into a single protein of 90 kDa, which displays enzymatic activity and undergoes proteolytic maturation into a heavy chain of 59 kDa and a light chain of 13.5 kDa; these subunits then dimerize into the mature tetramer and the mature MPO is a heterotetramer composed of two identical heavy chains and two identical light chains (PMID:12773517). Fragments with molecular masses of 43-47 kDa were formed by autocatalysis during warming in sample buffer (PMID:12960244). The 24-kDa material had a map identical to that of 13.5 kDa subunit and represents a dimer of the 13.5 kDa subunit (PMID:3008892). Defects in MPO are the cause of myeloperoxidase deficiency (MPOD). It has 3 isoforms produced by alternative splicing.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

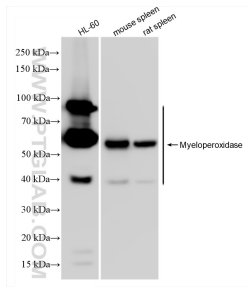
T: 4006900926

E: Proteintech-CN@ptglab.com

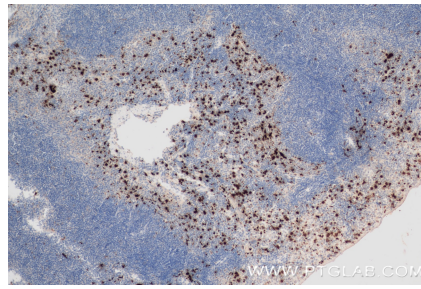
W: ptgcn.com

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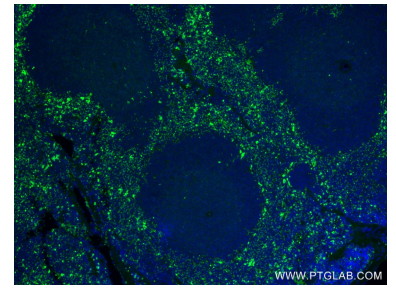
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84436-5-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 84436-5-RR (Mpo antibody) at dilution of 1:250 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using Mpo antibody (84436-5-RR, Clone: 241839C11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).