

# Biotin-conjugated MPO Polyclonal antibody

Catalog Number: Biotin-22225

## Basic Information

<b>Catalog Number:</b> Biotin-22225	<b>GenBank Accession Number:</b> BC130476	<b>Purification Method:</b> Antigen affinity purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 4353	<b>Recommended Dilutions:</b> IF-P: 1:50-1:500
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P05164	<b>Excitation/Emission maxima wavelengths:</b> -
<b>Immunogen Catalog Number:</b> AG17564	<b>Full Name:</b> myeloperoxidase	
	<b>Calculated MW:</b> 745 aa, 84 kDa	
	<b>Observed MW:</b> 59 kDa	

## Applications

<b>Tested Applications:</b> IF-P, ELISA	<b>Positive Controls:</b> IF-P: mouse spleen tissue,
<b>Species Specificity:</b> human, mouse, rat	

## Background Information

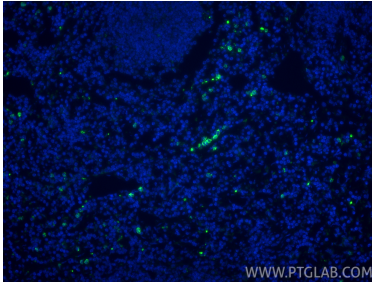
The MPO gene encodes myeloperoxidase, a lysosomal hemoprotein located in the azurophilic granules of polymorphonuclear (PMN) leukocytes and monocytes. In response to stimulation, MPO is activated into a transient intermediate with potent antimicrobial oxidizing abilities (PMID:17650507). The mRNA is 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. This antibody is specific to MPO.

## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using Biotin MPO antibody (Biotin-22225) at dilution of 1:200 and CoraLite® Plus 488-conjugated Streptavidin (PF00023). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).