

For Research Use Only

MPO Recombinant antibody

Catalog Number: 84436-5-RR



Basic Information

Catalog Number: 84436-5-RR	GenBank Accession Number: AAR99349	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 17523	CloneNo.: 241839C11
Source: Rabbit	UNIPROT ID: P11247	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:125-1:500 IF-P 1:200-1:800
Isotype: IgG	Full Name: myeloperoxidase	
	Calculated MW: 81KD	
	Observed MW: 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

*** 20ul sizes contain 0.1% BSA

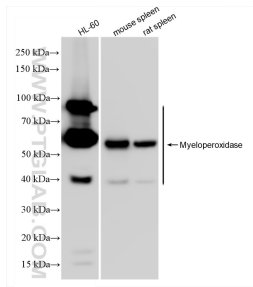
For technical support and original validation data for this product please contact:

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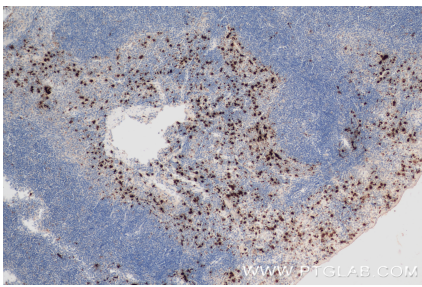
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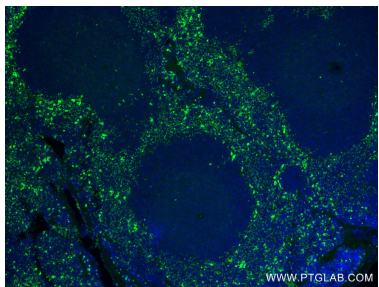
Selected Validation Data



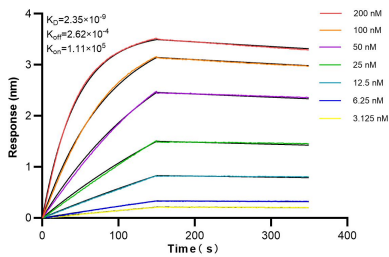
Various lysates were subjected to SDS PAGE followed by western blot with 84436-5-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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).



Biolayer interferometry (BLI) kinetic assays of 84436-5-RR against Mouse Mpo were performed. The affinity constant is 23.5 nM.