

For Research Use Only

# MPO Recombinant antibody

Catalog Number: 81610-1-RR

Featured Product



## Basic Information

<b>Catalog Number:</b> 81610-1-RR	<b>GenBank Accession Number:</b> BC130476	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4353	<b>CloneNo.:</b> 3J17
<b>Source:</b> Rabbit	<b>Full Name:</b> myeloperoxidase	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:800-1:3200
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 745 aa, 84 kDa	
<b>Immunogen Catalog Number:</b> AG17564	<b>Observed MW:</b> 59 kDa, 90 kDa	

## Applications

**Tested Applications:**  
IHC, WB, ELISA

**Species Specificity:**  
Human

**Positive Controls:**  
WB : HL-60 cells, human saliva  
IHC : human liver tissue,

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

## 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.

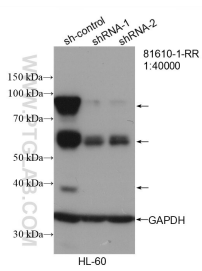
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

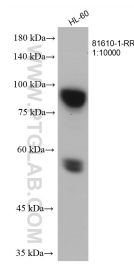
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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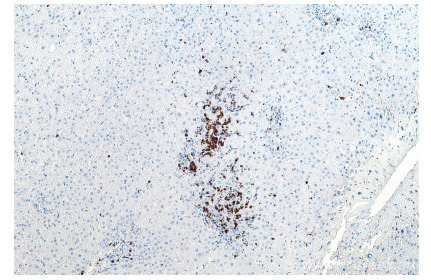
## Selected Validation Data



WB result of MPO antibody (81610-1-RR; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MPO transfected HL-60 cells.



HL-60 cells were subjected to SDS PAGE followed by western blot with 81610-1-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 81610-1-RR (MPO antibody) at dilution of 1:1600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).