

For Research Use Only

# MPO Recombinant antibody, PBS Only

Catalog Number: 81610-1-PBS

Featured Product



## Basic Information

Catalog Number:

81610-1-PBS

Concentration:

1mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG17564

GenBank Accession Number:

BC130476

GeneID (NCBI):

4353

UNIPROT ID:

P05164

Full Name:

myeloperoxidase

Calculated MW:

745 aa, 84 kDa

Observed MW:

59 kDa, 90 kDa

Purification Method:

Protein A purification

CloneNo.:

3J17

## Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human

## 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 -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

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

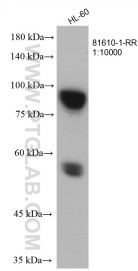
T: 4006900926

E: Proteintech-CN@ptglab.com

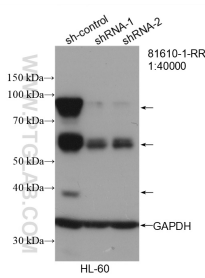
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

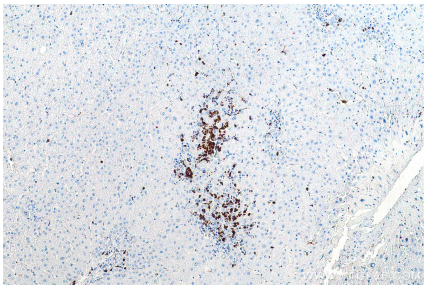
Selected Validation Data



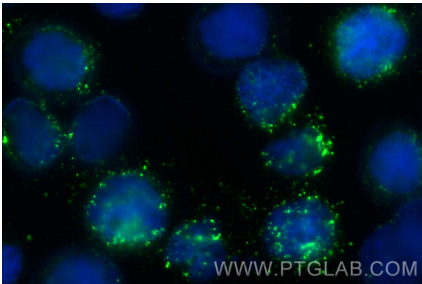
HL-60 cells were subjected to SDS PAGE followed by western blot with 81610-1-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer formulation.



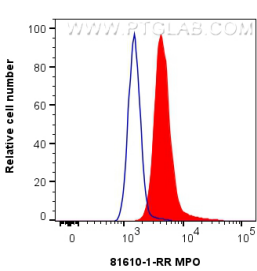
WB result of MPO antibody (81610-1-RR; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MPO transfected HL-60 cells. This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer formulation.



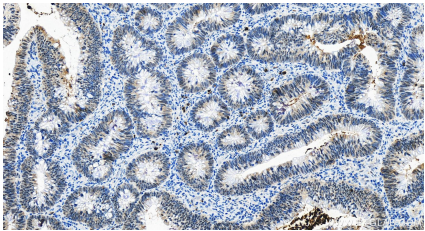
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 81610-1-RR (MPO antibody) at dilution of 1:1600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer formulation.



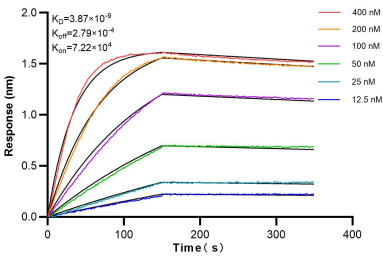
Immunofluorescent analysis of (4% PFA) fixed HL-60 cells using MPO antibody (81610-1-RR, Clone: 3J17) at dilution of 1:1600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HL-60 cells were intracellularly stained with 0.25 ug MPO Recombinant antibody (81610-1-RR, Clone:3J17) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81610-1-RR (MPO antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81610-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81610-1-RR against Human MPO were performed. The affinity constant is 3.87 nM.