

For Research Use Only

MPO Recombinant antibody

Catalog Number: 81610-1-RR

Featured Product

1 Publications



Basic Information

Catalog Number:	81610-1-RR	GenBank Accession Number:	BC130476	Purification Method:	Protein A purification
Size:	100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI):	4353	CloneNo.:	3J17
Source:	Rabbit	UNIPROT ID:	P05164	Recommended Dilutions:	WB 1:5000-1:50000
Isotype:	IgG	Full Name:	myeloperoxidase	IHC	1:800-1:3200
Immunogen Catalog Number:	AG17564	Calculated MW:	745 aa, 84 kDa	IF/ICC	1:800-1:3200
		Observed MW:	59 kDa, 90 kDa		

Applications

Tested Applications:	WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls:	
Cited Applications:	WB, IF	WB :	HL-60 cells, human saliva
Species Specificity:	human	IHC :	human liver tissue, human colon cancer tissue
Cited Species:	human	IF/ICC :	HL-60 cells,
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.

Notable Publications

Author	Pubmed ID	Journal	Application
Yurong Lu	39718052	Placenta	WB,IF

Storage

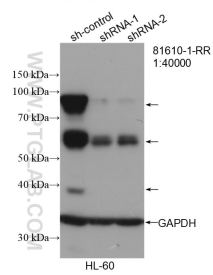
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

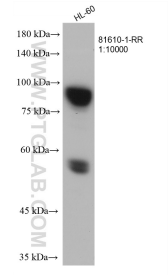
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

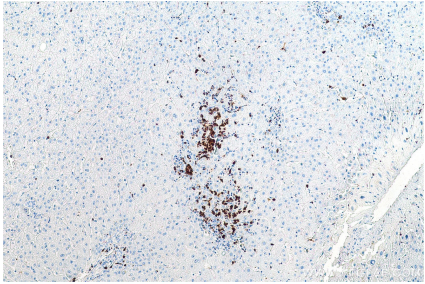
Selected Validation Data



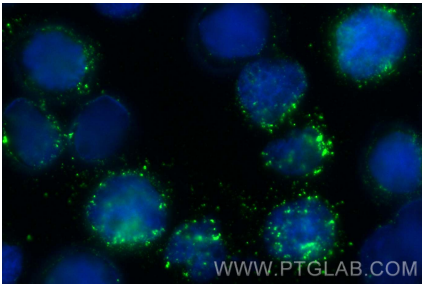
WB result of MPO antibody (81610-1-RR; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MPO transfected HL-60 cells.



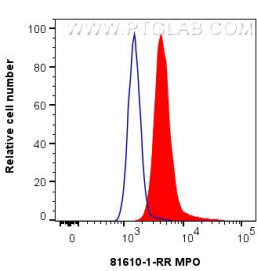
HL-60 cells were subjected to SDS PAGE followed by western blot with 81610-1-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



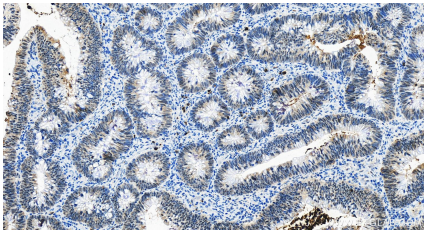
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 81610-1-RR (MPO antibody) at dilution of 1:1600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



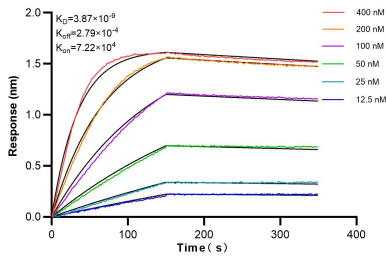
Immunofluorescent analysis of (4% PFA) fixed HL-60 cells using MPO antibody (81610-1-RR, Clone: 3J17) at dilution of 1:1600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10⁶ 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).



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).



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