

For Research Use Only

MPO Polyclonal antibody

Catalog Number: 22225-1-AP **185 Publications**



Basic Information

Catalog Number: 22225-1-AP	GenBank Accession Number: BC130476	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 800 ug/ml by Nanodrop;	GeneID (NCBI): 4353	Recommended Dilutions: WB: 1:1000-1:6000
Source: Rabbit	UNIPROT ID: P05164	IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Isotype: IgG	Full Name: myeloperoxidase	IHC: 1:50-1:500
Immunogen Catalog Number: AG17564	Calculated MW: 745 aa, 84 kDa	IF-P: 1:50-1:500
	Observed MW: 59 kDa	

Applications

Tested Applications: WB, IHC, IF-P, IP, ELISA	Positive Controls:
Cited Applications: WB, IHC, IF, ELISA	WB: HL-60 cells, U-937 cells
Species Specificity: human, mouse, rat	IP: HL-60 cells,
Cited Species: human, mouse, rat, bovine, hamster	IHC: human colon cancer tissue, human liver tissue, human spleen tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IF-P: human tonsillitis 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. This antibody is specific to MPO.

Notable Publications

Author	Pubmed ID	Journal	Application
Dayun Feng	36179025	Sci Adv	IF
Tingting Qin	36225585	Front Pharmacol	IHC, WB
Chaoqun Hou	31541854	Biomed Pharmacother	IHC

Storage

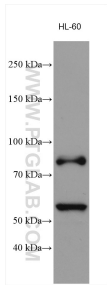
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

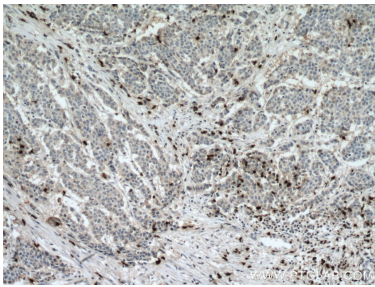
For technical support and original validation data for this product please contact:
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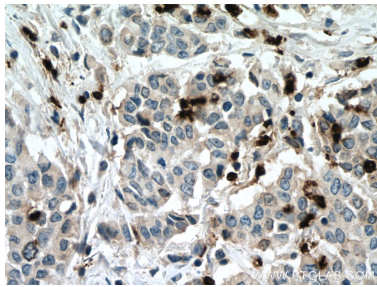
Selected Validation Data



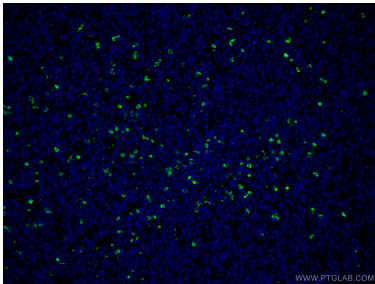
HL-60 cells were subjected to SDS PAGE followed by western blot with 22225-1-AP (MPO antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



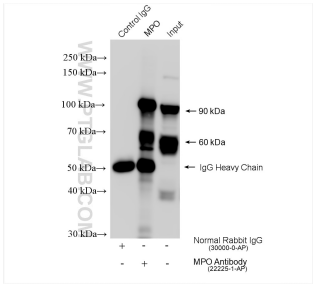
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 22225-1-AP (MPO antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 22225-1-AP (MPO antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using 22225-1-AP (MPO antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-MPO (IP:22225-1-AP, 4ug; Detection:22225-1-AP 1:4000) with HL-60 cells lysate 1720 ug.