SunLong Biotech Co.,LTD
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Rabbit Anti-MPO antibody

SL1061R

Product Name	MPO
Chinese Name	髓过氧化物酶抗体
Alias	Myeloperoxidase; c-ANCA; 89 kDa myeloperoxidase; 84 kDa yeloperoxidase; Myeloperoxidase light chain; Myeloperoxidase heavy chain; EC 1.11.1.7; PERM_HUMAN.
Research Area	Tumour Cell biology immunology Kinases and Phosphatases lymphocyte
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Dog,Cow,Horse,Rabbit,GuineaPig)
Applications	ELISA=1:5000-10000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	84kDa
Detection molecular weight	15/55-60/84-90 kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Myeloperoxidase: 51-150/745
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	Human(predicted:Mouse,Rat,Dog,Cow,Horse,Rabbit,GuineaPig)1M TBS(pH7.4) with 1% BSA, Human(predicted:Mouse,Rat,Dog,Cow,Horse,Rabbit,GuineaPig)3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Product Detail

Myeloperoxidase (MPO) is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of 2 light chains and 2 heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of neutrophils. [provided by RefSeq, Nov 2014]

Function:
Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity.

Subunit:
Tetramer of two light chains and two heavy chains.

Subcellular Location:
Lysosome.

DISEASE:
Defects in MPO are the cause of myeloperoxidase deficiency (MPD) [MIM:254600]. MPD is an autosomal recessive defect that results in disseminated candidiasis.

Similarity:
Belongs to the peroxidase family. XPO subfamily.

SWISS:
P05164

Gene ID:
4353

Database links:

Entrez Gene: 4353 Human

Entrez Gene: 17523 Mouse

Entrez Gene: 303413 Rat

Omim: 606989 Human

SwissProt: P05164 Human

SwissProt: P11247 Mouse

Unigene: 458272 Human

Unigene: 4668 Mouse

Unigene: 47782 Rat

髓过氧化物酶 MPO,作为一种白细胞酶,具有介导炎性反应、调节免疫应答等多种功能,并可参与疾病的发生发展过程。同时,髓过氧化物酶基因存在基因多态性,也影响机体对疾病的易感性. 在正常淋巴组织中和各种髓样细胞增生症中，MPO 均有较强表达，如：淋巴样细胞、原核细胞、肥大细胞、浆细胞以及各种上皮源性 Tumour 和肉瘤等。
髓过氧化物酶(myeloperoxidase,MPO),是一种血红素蛋白，富含于中性粒细胞中,由粒细胞进入循环之前在骨髓内合成并存储于嗜天青颗粒内。外界刺激可导致中性粒细胞聚集，从而释放髓过氧化物酶。MPO 的相对分子量为 150kDa，是由两个亚单位通过共价结合形成的四聚体，每个亚单位又有一条重链 α（相对分子量 60kDa）和一条轻链 β 链（相对分子量为 15kDa)构成。（重链和轻链通过二硫键结合）

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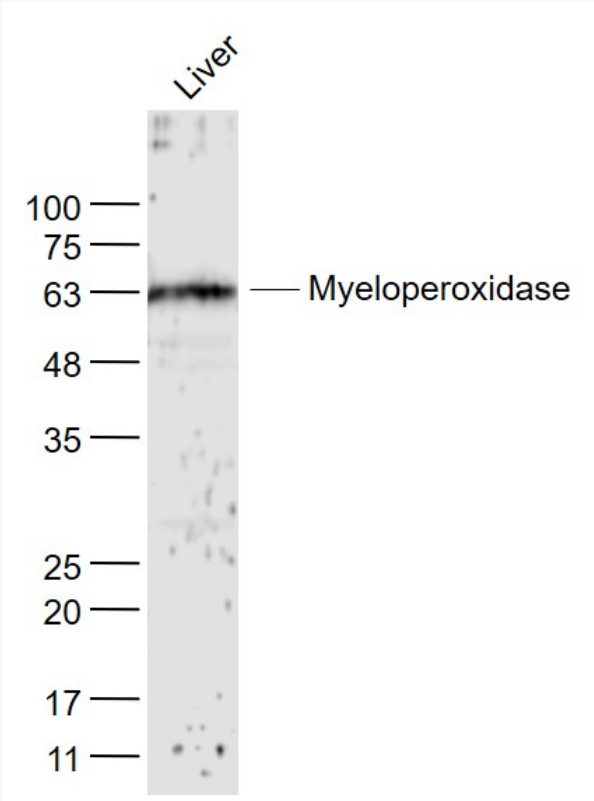
Product Picture



Sample:

Liver (Mouse) Lysate at 40 ug

Primary: Anti- Myeloperoxidase (SL1061R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 84 kD

Observed band size: 63 kD

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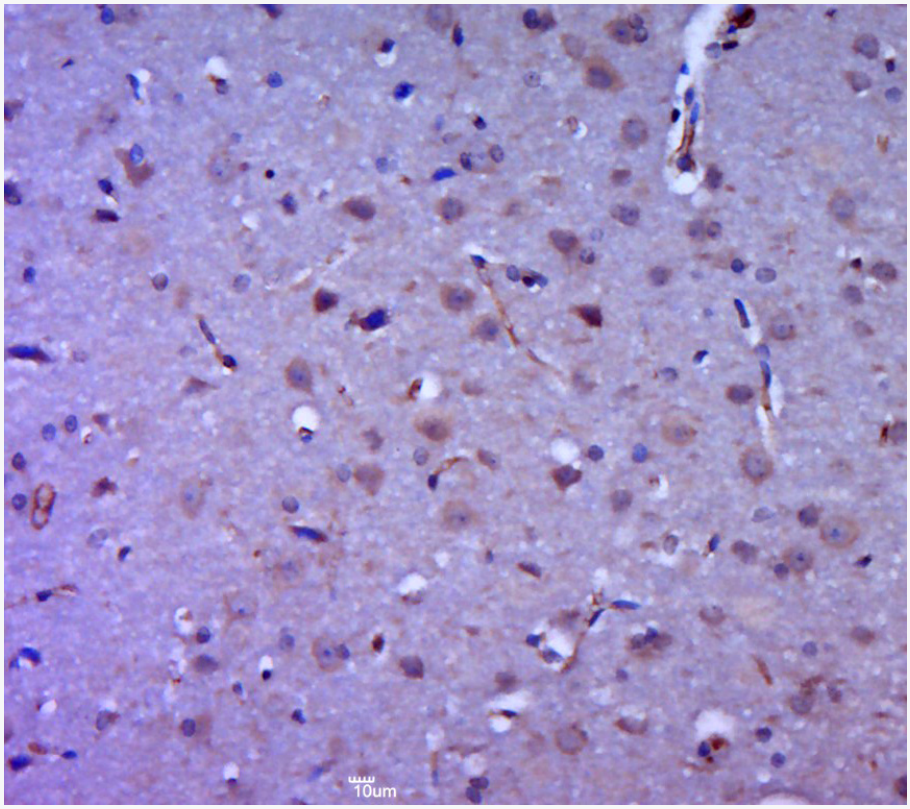

Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Myeloperoxidase) Polyclonal Antibody, Unconjugated (SL1061R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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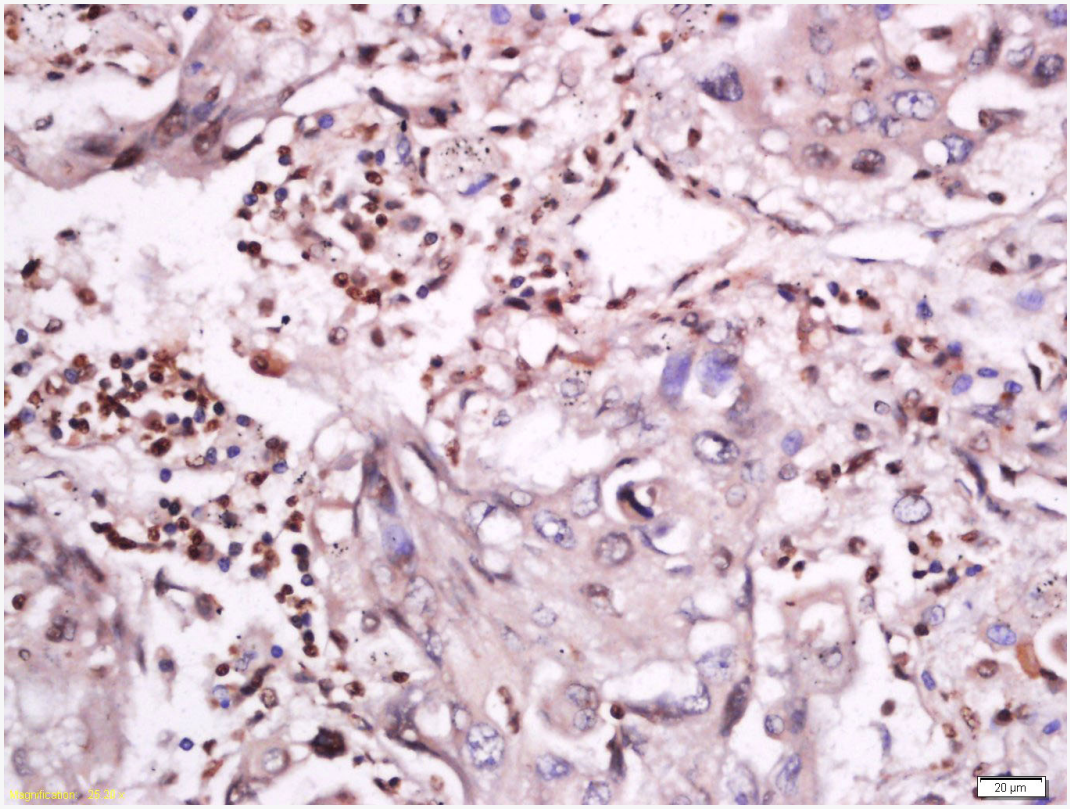
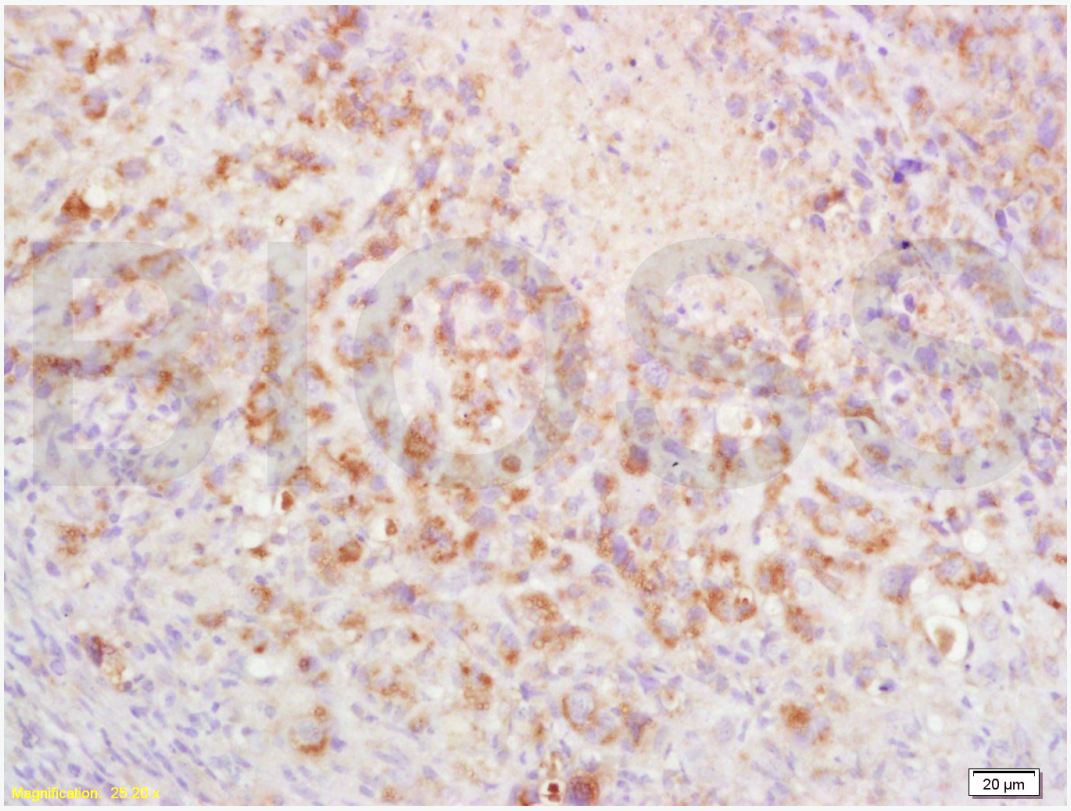


Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (Human(predicted:Mouse,Rat,Dog,Cow,Horse,Rabbit,GuineaPig)1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Myeloperoxidase Polyclonal Antibody, Unconjugated(SL1061R) 1:200, overnight at 4°C, followed by conjugation to the

secondary antibody(SP-0023) and DAB(C-0010) staining

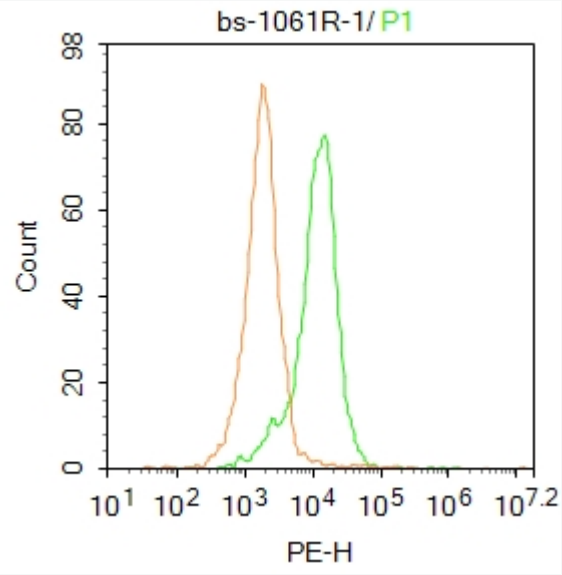


Tissue/cell: mouse lymphoma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (Human(predicted:Mouse,Rat,Dog,Cow,Horse,Rabbit,GuineaPig)1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MPO/c-ANCA Polyclonal Antibody, Unconjugated(SL1061R)

1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: HL60.

Primary Antibody (green line): Rabbit Anti-Myeloperoxidase antibody (SL1061R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

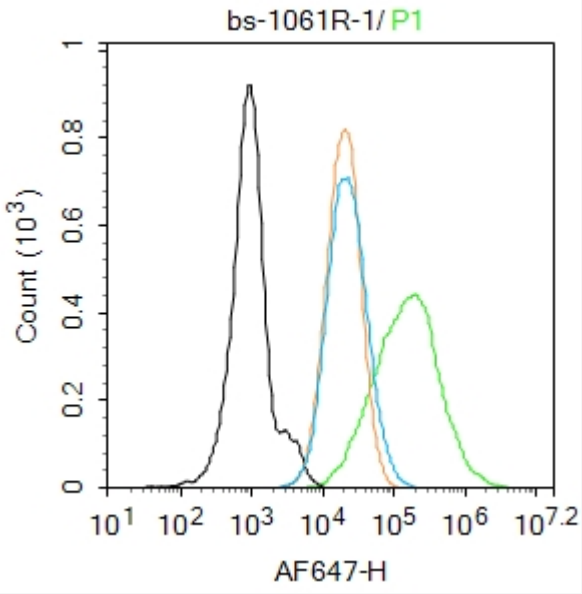
Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min

at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control:HL-60.

Primary Antibody (green line): Rabbit Anti-Myeloperoxidase antibody (SL1061R)

Dilution: 1µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then

permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature.Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.