

Rabbit anti-Human MPO Polyclonal Antibody | anti-MPO antibody

Anti-MPO Antibody Picoband

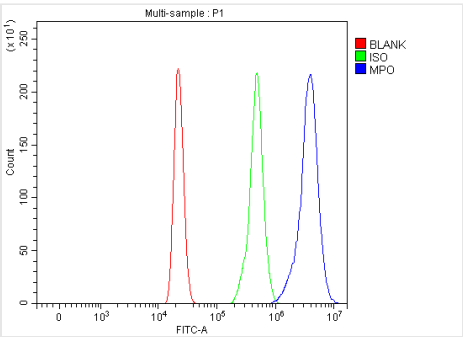
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126985	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

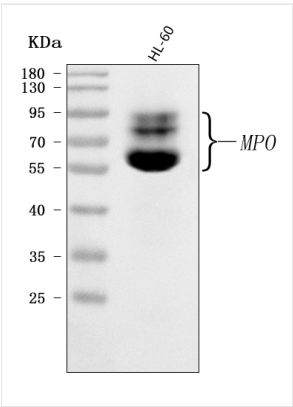
MPO; Polyclonal Antibody; Anti-MPO Antibody Picoband; Cyclic AMP-dependent transcription factor ATF-4; activating transcription factor 4 (tax-responsive enhancer element B67); cAMP-dependent transcription factor ATF-4; Activating transcription factor 4; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding protein 2; DNA-binding protein TAXREB67; Tax-responsive enhancer element-binding protein 67; TaxREB67; ATF4; CREB2; TXREB; anti-MPO antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. NotExpressed in the platelets.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-MPO antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human MPO recombinant protein (Position: K556-I697).
Subcellular Localization	Cytoplasm
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Transcriptional activator. Binds the cAMP response element (CRE)(consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production (By similarity). It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to endoplasmic reticulum (ER) stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. During ER stress response, activates the transcription of NLRP1, possibly in concert with other factors (PubMed:26086088).
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of HL-60 cells using anti-MPO antibody (AAA126985). Overlay histogram showing HL-60 cells stained with AAA126985 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MPO Antibody (AAA126985, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)
Figure 1. Western blot analysis of MPO using anti-MPO antibody (AAA126985). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HL-60 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MPO antigen affinity purified polyclonal antibody (#AAA126985) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MPO at approximately 55,80-90 kDa. The expected band size for MPO is at 84 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MPO antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-MPO antibody	Primary Antibodies; Domain Families; Epigenetics and Nuclear Signaling; Hlh/Leucine Zipper; Transcription
References	1. Klebanoff, S. J. : Myeloperoxidase. Proc. Assoc. Am. Phys. 111: 383-389, 1999.2. Murao, S.-I.; Stevens, F. J.; Ito, A.; Huberman, E. : Myeloperoxidase: a myeloid cell nuclear antigen with DNA-binding properties. Proc. Nat. Acad. Sci. 85: 1232-1236, 1988.3. Nauseef, W. M.; Olsson, I.; Arnljots, K. : Biosynthesis and processing of myeloperoxidase--a marker for myeloid cell differentiation. Europ. J. Haemat. 40: 97-110, 1988.

NCBI AND UNIPROT INFORMATION

NCBI GI #	188658
NCBI GeneID	4353
UniProt Accession #	P05164; Q14862; Q4PJH5; Q9UCL7; A1L4B8
Molecular Weight	83,869 Da
NCBI Official Full Name	myeloperoxidase
NCBI Official Synonym Full Names	myeloperoxidase
NCBI Official Symbol	MPO
NCBI Protein Information	myeloperoxidase
UniProt Protein Name	Myeloperoxidase
UniProt Gene Name	MPO
UniProt Synonym Gene Names	MPO

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mpo-antibody-flow-cytometry-western-blot-elisa/126985>