abcam

Product datasheet

Anti-Myeloperoxidase antibody [EPR17996] ab188211

Recombinant RabMAb

8 References 8 Images

Overview

Product name	Anti-Myeloperoxidase antibody [EPR17996]
Description	Rabbit monoclonal [EPR17996] to Myeloperoxidase
Host species	Rabbit
Specificity	This antibody is specific to Myeloperoxidase light chain.
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat spleen lysates. IHC-P: Human, mouse and rat spleen tissues. Flow Cyt (intra): Mouse PBMC, C57 BL/6 mouse bone marrow cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17996

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab188211 in the following tested applications.

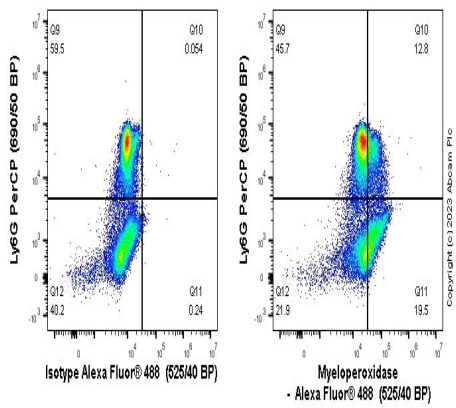
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 89, 74, 13 kDa (predicted molecular weight: 83 kDa).
IHC-P		1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

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.
Involvement in disease	Defects in MPO are the cause of myeloperoxidase deficiency (MPD) [MIM:254600]. MPD is an autosomal recessive defect that results in disseminated candidiasis.
Sequence similarities	Belongs to the peroxidase family. XPO subfamily.
Cellular localization	Lysosome.

Images



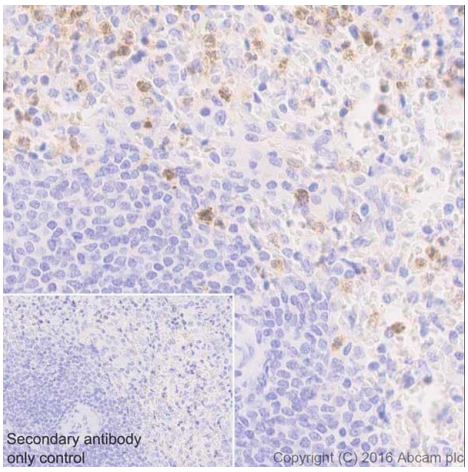
Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Flow cytometry staining of C57 BL/6 mouse bone marrow cells with ab188211 (right) or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (left). Cells were fixed and permeabilised with BD Cytofix/Cytoperm™ for 20 min. Cells were incubated for 30min at 22°C in 1x PBS containing 10µg/ml anti CD16/CD32 and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody ab188211 or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (1x 10^6 in 100 µl at 0.2 µg/ml (1/10200)) for 30min at 22°C. The cells were simultaneously stained with Ly6G.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on

viable cells.



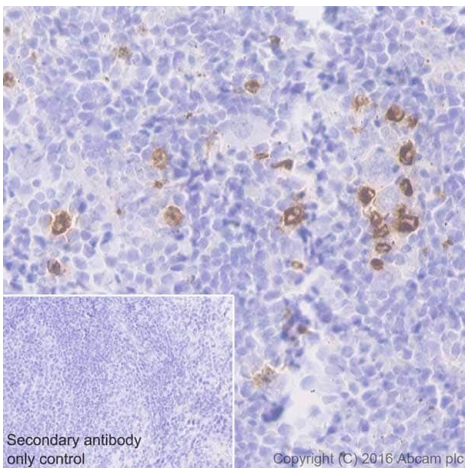
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling Myeloperoxidase with ab188211 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on neutrophils of human spleen [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Myeloperoxidase with ab188211 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on neutrophils of mouse spleen [PMID: 19566938].

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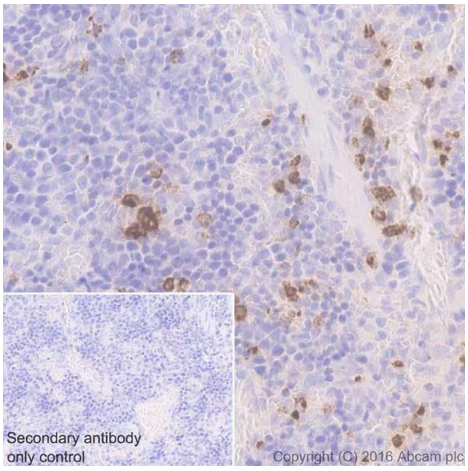


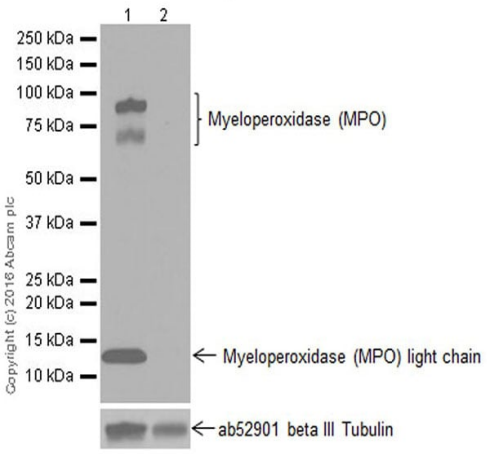
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Myeloperoxidase with ab188211 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on neutrophils of rat spleen [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

All lanes : Anti-Myeloperoxidase antibody [EPR17996] (ab188211) at 1/1000 dilution

Lane 1 : Mouse spleen lysate
Lane 2 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

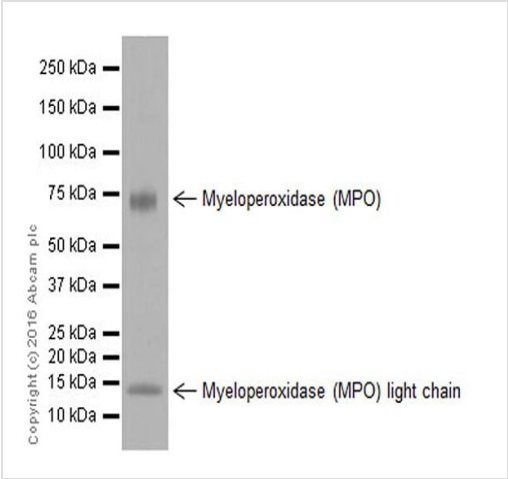
Predicted band size: 83 kDa
Observed band size: 13,74,89 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature. PMID: 2154223. 89 kDa (MPO), 74 kDa (intermediate form), 13 kDa (light chain)

Negative control: NIH/3T3 PMID: 9001423.



Western blot - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Anti-Myeloperoxidase antibody [EPR17996] (ab188211) at 1/1000 dilution + Rat spleen lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

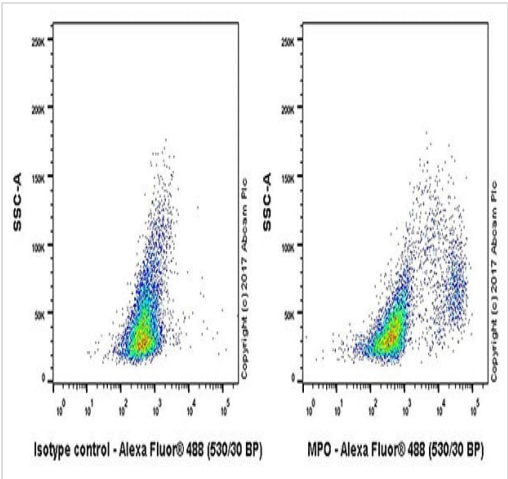
Predicted band size: 83 kDa

Observed band size: 13,74 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

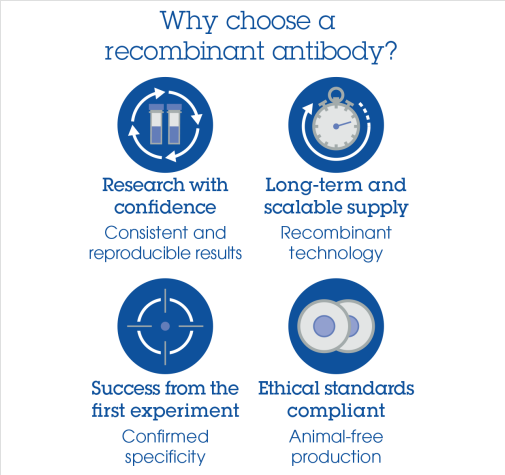
The molecular weight observed is consistent with what has been described in the literature PMID: 2154223.



Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR17996] (ab188211)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed mouse PBMC labeling Myeloperoxidase with ab188211 at 1/500 dilution (Right) compared with a rabbit monoclonal IgG isotype control (**ab172730**; Left). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

Mouse peripheral blood mononuclear cells stained intracellularly with ab188211 (Right) and isotype control (Left). Only monocytes and granulocytes (larger SSC population) result in positive signal while the lymphocyte population remains unchanged.



Anti-Myeloperoxidase antibody [EPR17996]

(ab188211)

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