# abcam

## Product datasheet

# Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free ab236022



## 6 Images

#### Overview

**Product name** Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free

**Description** Rabbit monoclonal [EPR17996] to Myeloperoxidase - BSA and Azide free

**Host species** Rabbit

Specificity This antibody is specific to Myeloperoxidase light chain.

**Tested applications** Suitable for: Flow Cyt (Intra), IHC-P, WB

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Rat spleen tissue. Flow cyto (intra): C57 BL/6 mouse bone marrow cells

**General notes** ab236022 is the carrier-free version of ab188211.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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**.

1

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR17996

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab236022 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)		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 89, 74, 13 kDa (predicted molecular weight: 83 kDa).

#### **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.

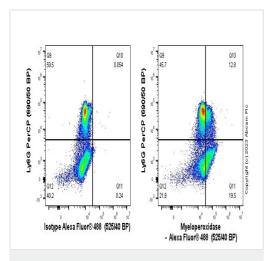
**Involvement in disease** Defects in MPO are the cause of myeloperoxidase deficiency (MPD) [MIM:254600]. MPD is an

autosomal recessive defect that results in disseminated candidiasis.

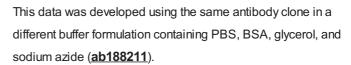
**Sequence similarities**Belongs to the peroxidase family. XPO subfamily.

Cellular localization Lysosome.

#### **Images**



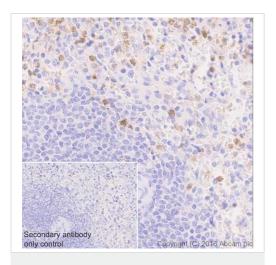
Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free (ab236022)



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<sup>6</sup> 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 lgG 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 paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free (ab236022)

Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling Myeloperoxidase with <u>ab188211</u> at 1/8000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

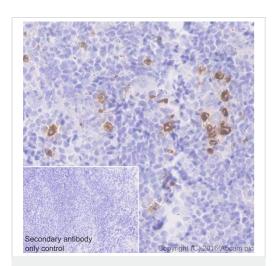
Cytoplasmic staining on neutrophils of human spleen [PMID: 19566938].

Counter stained with Hematoxylin.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab188211).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free (ab236022)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Myeloperoxidase with <u>ab188211</u> at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

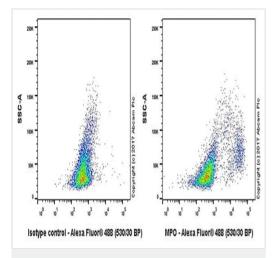
Cytoplasmic staining on neutrophils of mouse spleen [PMID: 19566938].

Counter stained with Hematoxylin.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab188211</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

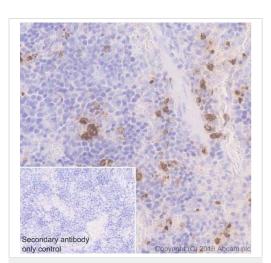


Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free (ab236022)

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

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab188211).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR17996] - BSA and Azide free (ab236022)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Myeloperoxidase with <u>ab188211</u> at 1/8000 dilution, followed by Goat Anti-Rabbit lgG 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 lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab188211</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors