abcam

Product datasheet

Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free ab221847

Recombinant RabMAb

1 References 8 Images

Overview

Product name	Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free
Description	Rabbit monoclonal [EPR20257] to Myeloperoxidase - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, Flow Cyt (Intra), ICC/IF, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	ab221847 is the carrier-free version of **ab208670**. 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 cell-based 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® 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**.

Properties

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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	EPR20257
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221847 in the following tested applications.

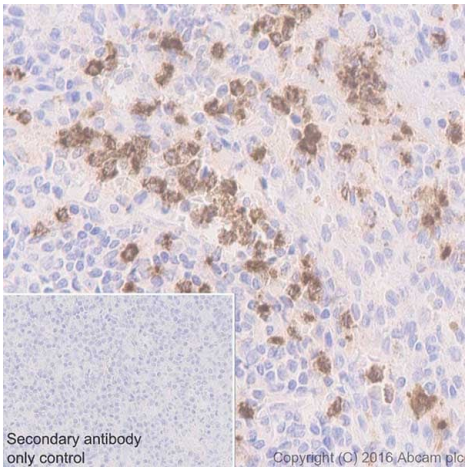
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 89, 59 kDa (predicted molecular weight: 83 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		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.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling Myeloperoxidase with **ab208670** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

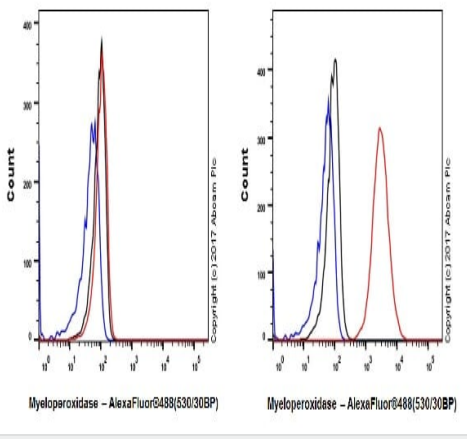
Cytoplasmic staining on neutrophils of human spleen is observed [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

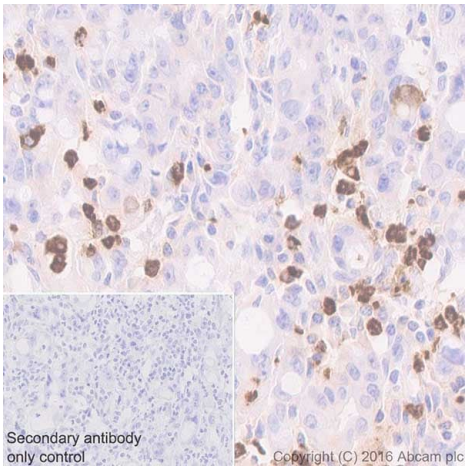
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa cells (left panel) and HL-60 cells (right panel) labeling Myeloperoxidase with **ab208670** at 1/500 dilution, compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control ((**ab172730**); black) and unlabelled control (cells without incubation with primary and secondary antibodies; blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody. **Negative control**: HeLa (PMID: 12040446). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue labeling Myeloperoxidase with **ab208670** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

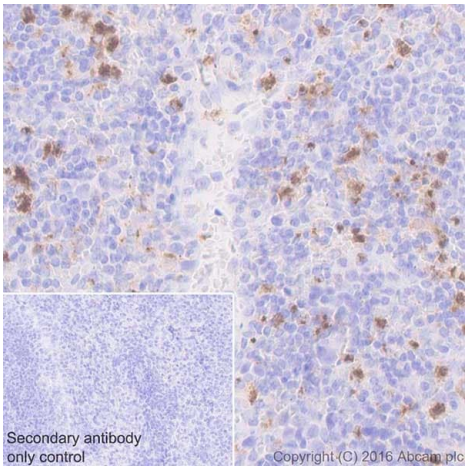
Cytoplasmic staining on neutrophils of human stomach cancer is observed [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Myeloperoxidase with **ab208670** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

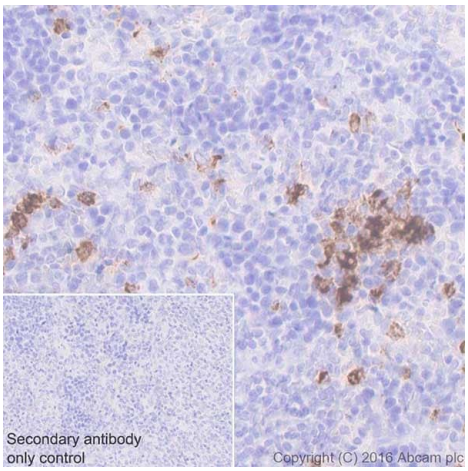
Cytoplasmic staining on neutrophils of mouse spleen is observed [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Myeloperoxidase with **ab208670** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

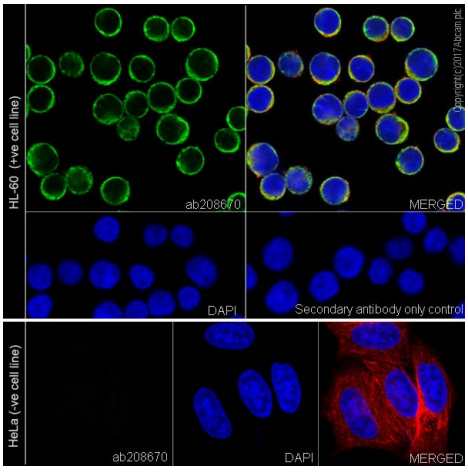
Cytoplasmic staining on neutrophils of rat spleen is observed [PMID: 19566938].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Immunocytochemistry/ Immunofluorescence - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Immunofluorescent analysis of 100% methanol-fixed HL-60 (Human promyelocytic leukemia cell line) and HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Myeloperoxidase with **ab208670** at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on HL-60 cell line**.**

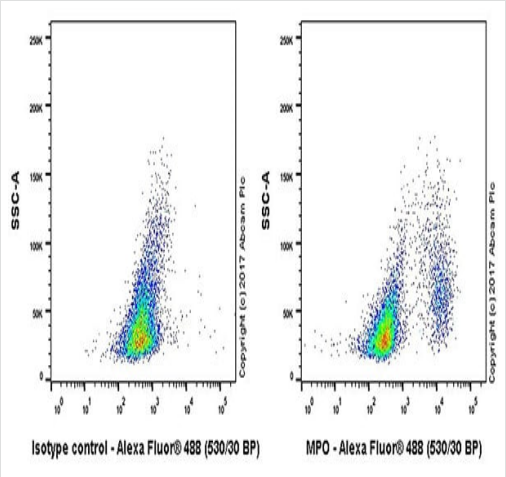
Negative control: HeLa (PMID: 12040446).

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

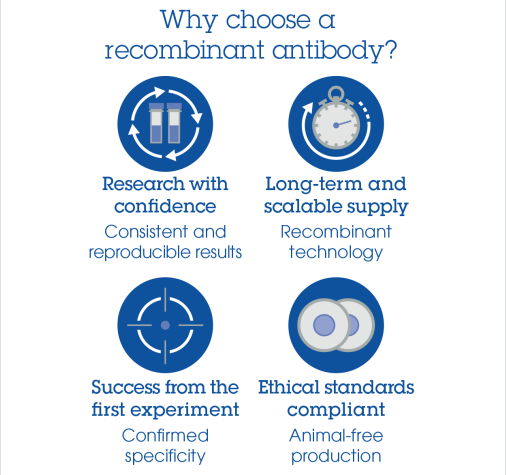
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208670**).



Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed Mouse PBMC cells labeling Myeloperoxidase with **ab208670** 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 **ab208670** (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 (**ab208670**).



Anti-Myeloperoxidase antibody [EPR20257] - BSA and Azide free (ab221847)

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