

Product datasheet

Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2 α (Chimeric) - BSA and Azide free ab300651

Recombinant

8 Images

Overview

Product name	Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2 α (Chimeric) - BSA and Azide free
Description	Rat monoclonal [EPR20257] to Myeloperoxidase - Chimeric – BSA and Azide free
Host species	Rat
Tested applications	Suitable for: IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human spleen tissue. Human gastric carcinoma. Mouse and rat spleen tissue. ICC/IF: HL-60 cells. Flow Cyt (intra): HL-60 cells. Mouse blood cells.
General notes	<p>ab300651 is a carrier free version of ab300650.</p> <p>This rat monoclonal chimeric antibody has been engineered from a RabMAb parent antibody (ab208670). By necessity, some rabbit sequence is retained as part of the variable domain. When multiplexing with other rabbit-derived antibodies, using cross absorbed FC-reactive secondary antibodies are recommended.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: 100% PBS
Carrier free	Yes
Purity	Ion Exchange Chromatography
Clonality	Monoclonal
Clone number	EPR20257
Isotype	IgG2a

Applications

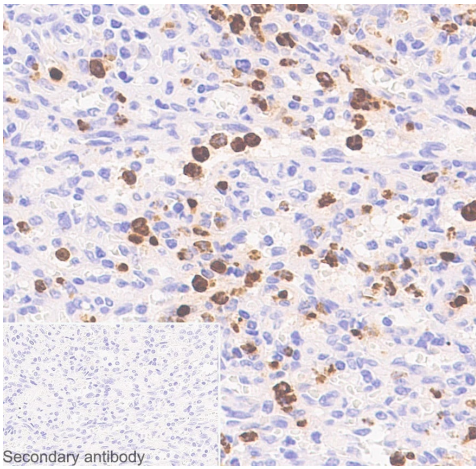
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab300651 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

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] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

This data was developed using AB300650, the same antibody clone in a different buffer formulation.

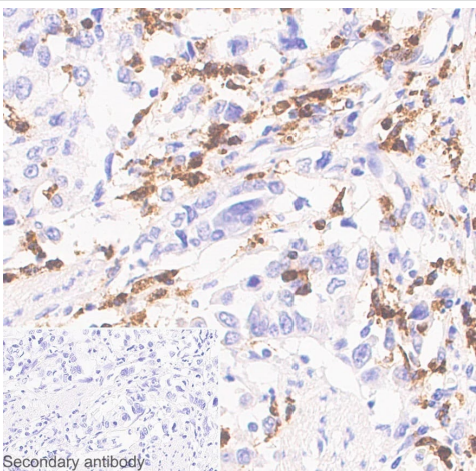
Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling Myeloperoxidase with AB300650 at 1/10000 dilution (0.101 µg/ml) followed by ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Positive staining on human spleen.

The section was incubated with **ab300650** for 30 mins at room temperature, followed by Goat Anti-rat IgG antibody (**ab102248**) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

This data was developed using AB300650, the same antibody clone in a different buffer formulation.

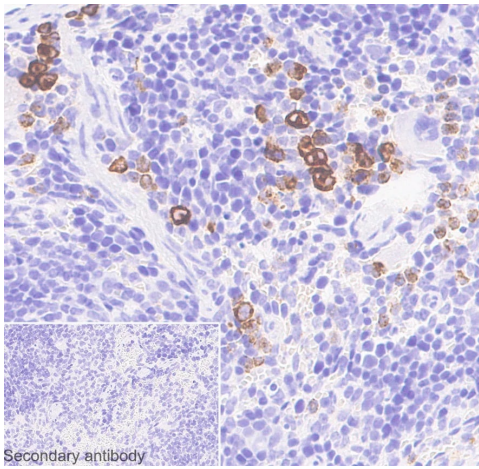
Immunohistochemical analysis of paraffin-embedded human gastric carcinoma tissue labeling Myeloperoxidase with AB300650 at 1/10000 dilution (0.101 µg/ml) followed by ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Positive staining on human gastric carcinoma.

The section was incubated with **ab300650** for 30 mins at room temperature, followed by Goat Anti-rat IgG antibody (**ab102248**) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

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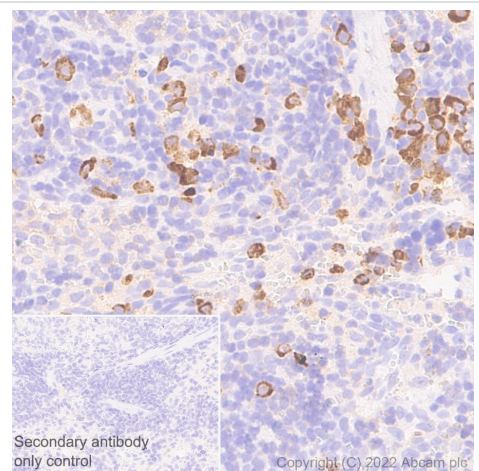
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Myeloperoxidase with AB300650 at 1/10000 dilution (0.101 µg/ml) followed by ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Positive staining on mouse spleen.

The section was incubated with **ab300650** for 30 mins at room temperature, followed by Goat Anti-rat IgG antibody (**ab102248**) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

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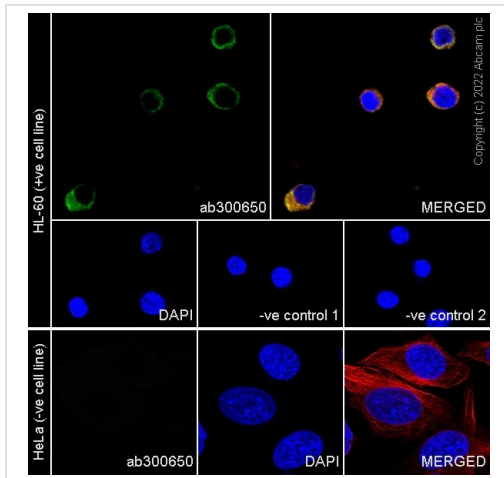
Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Myeloperoxidase with AB300650 at 1/10000 dilution (0.101 µg/ml) followed by ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Positive staining on rat spleen.

The section was incubated with **ab300650** for 30 mins at room temperature, followed by Goat Anti-rat IgG antibody (**ab102248**) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

This data was developed using AB300650, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HL-60 (human acute promyelocytic leukemia promyeloblast) cells labeling Myeloperoxidase with AB300650 at 1/50 dilution (20.26 µg/ml), followed by **ab150161** Goat F(ab')₂ Anti-Rat IgG Fc (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 µg/ml) (Green).

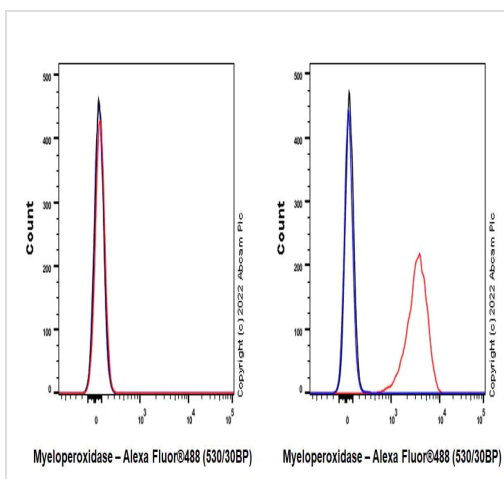
Confocal image showing cytoplasmic staining in HL-60 cell line.

Negative control: HeLa (PMID: 12040446).

ab179513 Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution (10µg/ml), followed by **ab150080** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at a 1/500 dilution (4 µg/ml) (Red). The nuclear counterstain was DAPI (Blue).

-ve control 1: AB300650 at a 1/50 dilution followed by **ab150080** at a 1/500 dilution.

-ve control 2: **ab179513** at a 1/200 dilution followed by **ab150161** at a 1/1000 dilution.

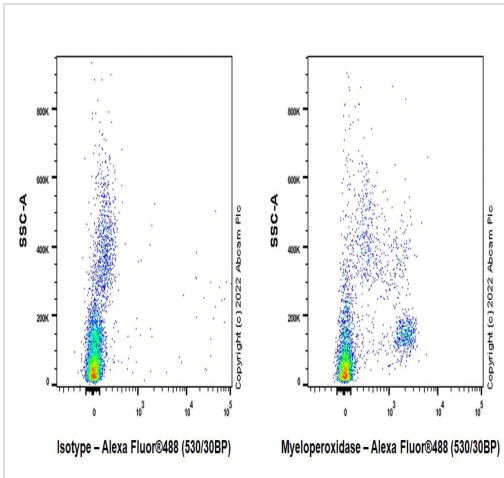


Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

This data was developed using AB300650, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde-fixed 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell, Left) / HL-60 (human acute promyelocytic leukemia promyeloblast, Right) cells labeling Myeloperoxidase with AB300650 at 1/1000 dilution (0.1µg) (Red) compared with a rat monoclonal IgG (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat F(ab)₂ Anti-Rat IgG Fc (Alexa Fluor® 488, **ab150161**) at 1/2000 dilution was used as the secondary antibody.

Negative control: HeLa (PMID: 12040446).







This data was developed using AB300650, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde-fixed 90% methanol permeabilized mouse blood cells labeling

Myeloperoxidase with AB300650 at 1/1000 dilution (0.1µg)/ Right compared with a rat monoclonal IgG / Left. Goat F(ab)₂ Anti-Rat IgG Fc (Alexa Fluor[®] 488, **ab150161**) at 1/2000 dilution was used as the secondary antibody.

Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] - Rat IgG2a (Chimeric) - BSA and Azide free (ab300651)

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

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