abcam

Product datasheet

Anti-Myeloperoxidase antibody [EPR20257] ab208670



★★★★★ 6 Abreviews 95 References 11 Images

Overview

Product name Anti-Myeloperoxidase antibody [EPR20257]

Description Rabbit monoclonal [EPR20257] to Myeloperoxidase

Host species Rabbit

Specificity This antibody is specific to Myeloperoxidase heavy chain.

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: Human fetal spleen lysate; Rat and mouse spleen lysates; HL-60 whole cell lysate. IHC-P:

Human spleen and stomach cancer tissues; Mouse and rat spleen tissues. ICC/IF: HL-60 cells.

Flow Cyt (intra): Mouse PBMC and HL-60 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

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, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR20257

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab208670 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, 59 kDa (predicted molecular weight: 83 kDa).
IHC-P	****(3)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.

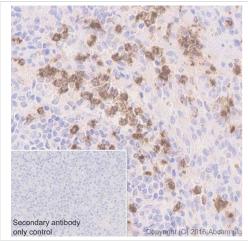
Function	Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates 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 similaritiesBelongs to the peroxidase family. XPO subfamily.

Cellular localization Lysosome.

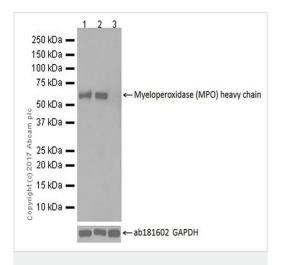
Images

Target



embedded sections) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

Immunohistochemistry (Formalin/PFA-fixed paraffin-



Western blot - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

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.

All lanes: Anti-Myeloperoxidase antibody [EPR20257] (ab208670) at 1/1000 dilution

Lane 1: Human fetal spleen lysate

Lane 2: Rat spleen lysate

Lane 3: HeLa (Human epithelial cell line from cervix adenocarcinoma) 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

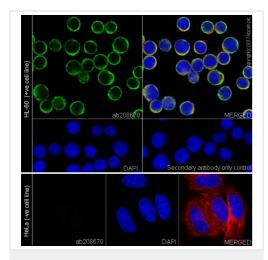
Predicted band size: 83 kDa Observed band size: 59 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature. PMID: 3029127 PMID: 2154223.

Negative control: HeLa PMID 12040446.



Immunocytochemistry/ Immunofluorescence - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

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 lgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green).

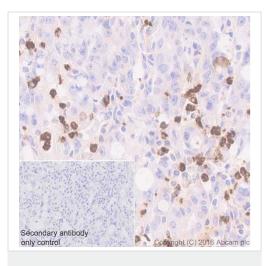
Confocal image showing cytoplasmic staining on HL-60 cell line.

Negative control: HeLa (PMID: 12040446).

The nuclear counterstain is DAPI (blue).

Tubulin is detected with <u>ab195889</u> (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 lgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

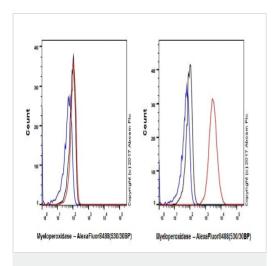
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue labeling Myeloperoxidase with ab208670 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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

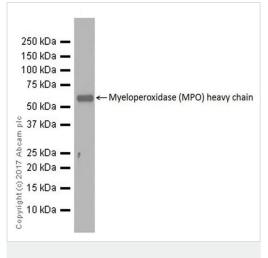
Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG 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.



Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670) Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa cells (left panel) and HL-60cells (right panel)labeling Myeloperoxidase with ab208670 at 1/500 dilution, compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control ((ab172730);black)andunlabelled 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).



Western blot - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

Anti-Myeloperoxidase antibody [EPR20257] (ab208670) at 1/5000 dilution + Mouse spleen lysate at $20~\mu g$

Secondary

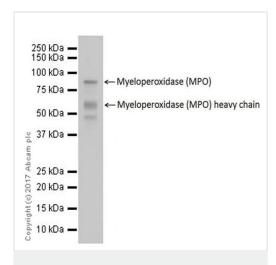
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 83 kDa Observed band size: 59 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature. PMID: 3029127 PMID: 2154223.



Western blot - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

Anti-Myeloperoxidase antibody [EPR20257] (ab208670) at 1/20000 dilution + HL-60 (Human promyelocytic leukemia cell line) whole cell lysate at 10 µg

Secondary

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

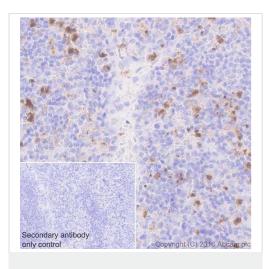
Predicted band size: 83 kDa

Observed band size: 39,59,89 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature. PMID: 2154223 PMID: 8384653.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

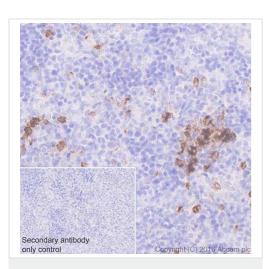
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Myeloperoxidase with ab208670 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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 lgG 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

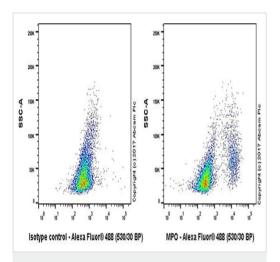
Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Myeloperoxidase with ab208670 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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

Counter stained with Hematoxylin.

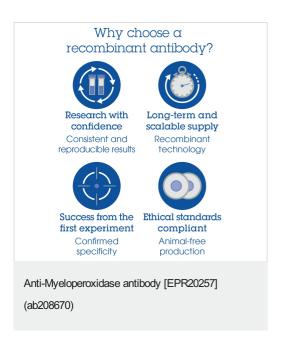
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

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



Flow Cytometry (Intracellular) - Anti-Myeloperoxidase antibody [EPR20257] (ab208670)

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 lgG isotype control (ab172730;left). Goat anti rabbit lgG (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.



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