# abcam

## Product datasheet

## Anti-Myeloperoxidase antibody ab45977

★★★★★ 17 Abreviews 74 References 5 图像

概述

产品名称 Anti-Myeloperoxidase抗体

描述 兔多克隆抗体to Myeloperoxidase

**宿主** Rabbit

特异性 ab45977 has been batch tested using human lysates/tissues only. Some customers have

successfully used ab45977 with rat. Please contact Abcam Scientific Support for more

information.

经测试应用 适用于: ICC/IF, WB, IHC-P

种属反应性 与反应: Human

预测可用于: Rat, Common marmoset \_\_\_\_\_\_

免疫原 Synthetic peptide corresponding to Human Myeloperoxidase aa 150-250 conjugated to keyhole

limpet haemocyanin.

(Peptide available as ab45976)

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** lgG

### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab45977于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	**** <u>(1)</u>	Use a concentration of 5 - 10 µg/ml.
WB	* * * * * <u>(2)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 84 kDa (predicted molecular weight: 84 kDa).
IHC-P	<b>★★★★★ (11)</b>	Use a concentration of 1 µg/ml.

## 靶标

功能 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.

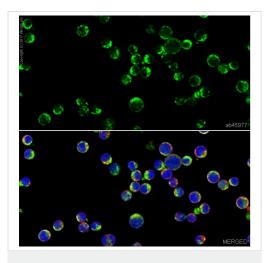
疾病相关 Defects in MPO are the cause of myeloperoxidase deficiency (MPD) [MIM:254600]. MPD is an

autosomal recessive defect that results in disseminated candidiasis.

序列相似性 Belongs to the peroxidase family. XPO subfamily.

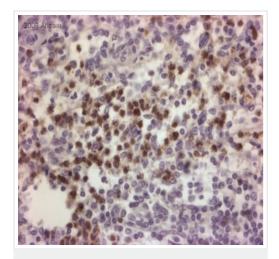
细**胞定位** Lysosome.

## 图片



Immunocytochemistry/ Immunofluorescence - Anti-Myeloperoxidase antibody (ab45977)

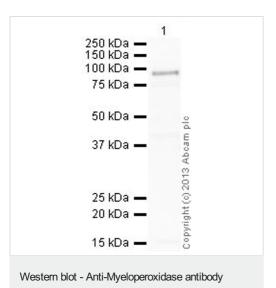
ab45977 stained in HL60 cells. Cells were fixed with 100% methanol (5min) at room temperature and incubated with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 1h at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab45977 at 5µg/ml and ab72791 (Mouse monoclonal to alpha Tubulin - Loading Control) at 1µg/ml overnight at +4°C. The secondary antibodies used were ab150081 used at 1 µg/ml (colored green) and ab150116 (pseudocolored red) used at 2µg/ml for 1hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43µM for 1hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody (ab45977)

This image is courtesy of an Abreview submitted by Antibody Solutions Ltd.

ab45977 (1/50) staining Myeloperoxidase in paraffin-embbeded human spleen tissue sections. Tissue underwent fixation in formaldehyde, heat-mediated antigen retrieval in citrate buffer pH 6.0 and blocking (5 minutes/peroxidase block and 10 minutes/protein block). For further experimental details please refer to abreview.



(ab45977)

Anti-Myeloperoxidase antibody (ab45977) at 1  $\mu$ g/ml + HL60 (Human promyelocytic leukemia cell line) Whole Cell Lysate at 20  $\mu$ g

#### **Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

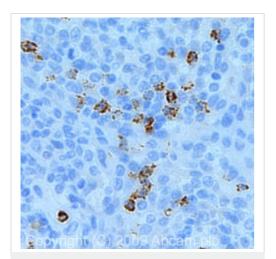
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 84 kDa **Observed band size:** 84 kDa

Exposure time: 2 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab45977 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution ab133406



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myeloperoxidase antibody (ab45977)

IHC image of 45977 staining in human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab45977, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Anti-Myeloperoxidase antibody (ab45977) at 1 µg/ml + HL60 (Human promyelocytic leukemia cell line) Whole Cell Lysate at 20 µg

#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

**Predicted band size:** 84 kDa **Observed band size:** 84 kDa

Additional bands at: 12 kDa, 35 kDa, 75 kDa. We are unsure as

to the identity of these extra bands.

Exposure time: 3 minutes

The mature myeloperoxidase protein is a tetramer of two heavy chains (60 kDa) and two light chains (12 kDa). Our immunogen sequence is within the myeloperoxidase light chain. In HL60 cells, ab45977 detects bands at approximately 84-kDa, corresponding to the expected MW of full-length Myeloperoxidase protein, and at 12-kDa, corresponding to the expected MW of myeloperoxidase light chain.

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

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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