# abcam

### Product datasheet

# Anti-Myeloperoxidase antibody ab139748

## 11 References 2 Images

Overview

Product name Anti-Myeloperoxidase antibody

**Description** Rabbit polyclonal to Myeloperoxidase

Host species Rabbit

**Specificity** From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our

alternative recombinant antibody, ab208670.

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Mouse

Predicted to work with: Rat

Immunogen Synthetic peptide corresponding to Mouse Myeloperoxidase aa 650 to the C-terminus conjugated

to keyhole limpet haemocyanin.

Database link: P11247

**Positive control**This antibody gave a positive signal in Mouse Bone Marrow and Mouse Spleen tissue lysates.

This antibody gave a positive result in IHC in the following FFPE tissue: Mouse normal spleen.

**General notes**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

**Properties** 

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

1

#### 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.

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

# **Applications**

The Abpromise guarantee

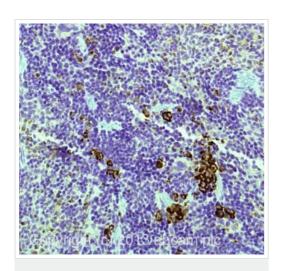
Our <u>Abpromise guarantee</u> covers the use of ab139748 in the following tested applications.

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

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 64 kDa (predicted molecular weight: 81 kDa).
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 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 paraffinembedded sections) - Anti-Myeloperoxidase antibody (ab139748)

Western blot - Anti-Myeloperoxidase antibody (ab139748)

IHC image of Myeloperoxidase staining in Mouse normal spleen formalin fixed paraffin embedded tissue section, performed on a Leica Bond ™ system using the standard protocol B. 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 ab139748, 1µg/ml, for 15 mins at room temperature. A Goat anti-Rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

All lanes: Anti-Myeloperoxidase antibody (ab139748) at 1 µg/ml

Lane 1: Mouse Bone Marrow Tissue Lysate

Lane 2: Spleen (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000

dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 81 kDa **Observed band size:** 63 kDa

Additional bands at: 48 kDa (possible cleavage fragment)

Exposure time: 30 seconds

The band observed at 64 kDa could potentially be a cleaved form of Myeloperoxidase due to the presence of both a 15 amino acid signal peptide and a 123 amino acid propeptide.

The band observed at 48 kDa could also represent the Myeloperoxidase heavy chain.

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 5% Bovine Serum Albumin before being incubated with ab139748 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

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