

Datasheet: 0400-0002

**BATCH NUMBER 161409**

<b>Description:</b>	MOUSE ANTI HUMAN MYELOPEROXIDASE
<b>Specificity:</b>	MYELOPEROXIDASE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	4A4
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.2 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Western Blotting	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

Immunogen Human myeloperoxidase.

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External Database

Links

UniProt:

[P05164](#) [Related reagents](#)

Entrez Gene:

[4353](#) MPO [Related reagents](#)

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RRID

AB\_617350

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Specificity

**Mouse anti Human Myeloperoxidase antibody, clone 4A4** recognizes myeloperoxidase (MPO). MPO is an important component of azurophilic granules in neutrophils, being involved in microbicidal processes. The protein is a multimer of 2 heavy chains (~55 kDa) and two light chains (~15 kDa), the heavy chains being linked by a disulphide bond.

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References

1. Chatfield, S.M. *et al.* (2018) Monosodium Urate Crystals Generate Nuclease-Resistant Neutrophil Extracellular Traps via a Distinct Molecular Pathway. [J Immunol. 200 \(5\): 1802-16.](#)
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3. Demoruelle, M.K. *et al.* (2018) Antibody Responses to Citrullinated and Noncitrullinated Antigens in the Sputum of Subjects With Rheumatoid Arthritis and Subjects at Risk for Development of Rheumatoid Arthritis. [Arthritis Rheumatol. 70 \(4\): 516-27.](#)
4. Mikacenic, C. *et al.* (2018) Neutrophil extracellular traps (NETs) are increased in the alveolar spaces of patients with ventilator-associated pneumonia. [Crit Care. 22 \(1\): 358.](#)
5. Guo, L. *et al.* (2019) A high-risk luminal A dominant breast cancer subtype with increased mobility. [Breast Cancer Res Treat. 175 \(2\): 459-72.](#)
6. Helseth, R. *et al.* (2019) Neutrophil Extracellular Trap Components Associate with Infarct Size, Ventricular Function, and Clinical Outcome in STEMI. [Mediators of Inflammation. 2019: 1-10.](#)
7. Donkel, S.J. *et al.* (2021) Circulating Myeloperoxidase (MPO)-DNA complexes as marker for Neutrophil Extracellular Traps (NETs) levels and the association with cardiovascular risk factors in the general population. [PLoS One. 16 \(8\): e0253698.](#)
8. Zenlander, R. *et al.* (2021) Neutrophil extracellular traps in patients with liver cirrhosis and hepatocellular carcinoma. [Sci Rep. 11 \(1\): 18025.](#)
9. Zapponi, K.C.S. *et al.* (2021) Neutrophil activation and circulating neutrophil extracellular traps are increased in venous thromboembolism patients for at least one year after the clinical event. [J Thromb Thrombolysis. Aug 27 \[Epub ahead of print\].](#)
10. Kluge, K.E. *et al.* (2020) Complement Activation in Association with Markers of Neutrophil Extracellular Traps and Acute Myocardial Infarction in Stable Coronary Artery Disease. [Mediators Inflamm. 2020: 5080743.](#)
11. Langseth, M.S. *et al.* (2020) Double-Stranded DNA and NETs Components in Relation to Clinical Outcome After ST-Elevation Myocardial Infarction. [Sci Rep. 10 \(1\): 5007.](#)
12. Tilly, M.J. *et al.* (2022) Immunothrombosis and new-onset atrial fibrillation in the general population: the Rotterdam Study. [Clin Res Cardiol. 111 \(1\): 96-104.](#)
13. Takeuchi, S. *et al.* (2022) Elevated Myeloperoxidase-DNA Complex Levels in Sera of

Patients with IgA Vasculitis. [Pathobiology. 89 \(1\): 23-8.](#)

14. Zhang, H. *et al.* (2022) Neutrophil extracellular traps mediate m<sup>6</sup>A modification and regulates sepsis-associated acute lung injury by activating ferroptosis in alveolar epithelial cells. [Int J Biol Sci. 18 \(8\): 3337-3357.](#)

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/0400-0002>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

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'M388958:210806'

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