

## Datasheet: 0400-0002

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|----------------------|----------------------------------|
| <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.

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| <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>       | 0.09% Sodium Azide (NaN <sub>3</sub> )                                     |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml  |
| <b>Immunogen</b>                      | Human myeloperoxidase.   |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">P05164</a> <a href="#">Related reagents</a> |
|                                       | <b>Entrez Gene:</b>  |

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| <b>RRID</b> | AB_617350 |
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| <b>Specificity</b> | <b>Mouse anti Human Myeloperoxidase antibody, clone 4A4</b> 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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| <b>References</b> | <ol style="list-style-type: none"><li>1. Chatfield, S.M. <i>et al.</i> (2018) Monosodium Urate Crystals Generate Nuclease-Resistant Neutrophil Extracellular Traps via a Distinct Molecular Pathway. <a href="#">J Immunol. 200 (5): 1802-16.</a></li><li>2. Demoruelle, M.K. <i>et al.</i> (2017) Anti-Citrullinated Protein Antibodies Are Associated With Neutrophil Extracellular Traps in the Sputum in Relatives of Rheumatoid Arthritis Patients. <a href="#">Arthritis Rheumatol. 69 (6): 1165-75.</a></li><li>3. Demoruelle, M.K. <i>et al.</i> (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. <a href="#">Arthritis Rheumatol. 70 (4): 516-27.</a></li><li>4. Mikacenic, C. <i>et al.</i> (2018) Neutrophil extracellular traps (NETs) are increased in the alveolar spaces of patients with ventilator-associated pneumonia. <a href="#">Crit Care. 22 (1): 358.</a></li><li>5. Guo, L. <i>et al.</i> (2019) A high-risk luminal A dominant breast cancer subtype with increased mobility. <a href="#">Breast Cancer Res Treat. 175 (2): 459-72.</a></li><li>6. Helseth, R. <i>et al.</i> (2019) Neutrophil Extracellular Trap Components Associate with Infarct Size, Ventricular Function, and Clinical Outcome in STEMI. <a href="#">Mediators of Inflammation. 2019: 1-10.</a></li></ol> |
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| <b>Storage</b> | Store at +4°C or at -20°C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
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| <b>Guarantee</b> | 12 months from date of despatch |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br>10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> |
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| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Secondary Antibodies

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|---|--|
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a> |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                              |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                              |
| Rabbit Anti Mouse IgG (STAR8...)        | <a href="#">DyLight®800</a>                      |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                              |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                              |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                             |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>       |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                             |

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)

## Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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