Datasheet: 0400-0002

BATCH NUMBER 161409

Description:	MOUSE ANTI HUMAN MYELOPEROXIDASE
Specificity:	MYELOPEROXIDASE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4A4
Isotype:	IgG2b
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN_3)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Human myeloperoxidase.
External Database Links	**UniProt:** P05164 Related reagents **Entrez Gene:** 4353 MPO Related reagents
RRID	AB_617350
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.
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. 2. Demoruelle, M.K. *et al.* (2017) Anti-Citrullinated Protein Antibodies Are Associated With Neutrophil Extracellular Traps in the Sputum in Relatives of Rheumatoid Arthritis Patients. Arthritis Rheumatol. 69 (6): 1165-75. 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^{6}A modification and regulates sepsis-associated acute lung injury by activating ferroptosis in alveolar epithelial cells. Int J Biol Sci. 18 (8): 3337-3357.

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/0400-0002 10040
Regulatory	For research purposes only

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
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
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