Datasheet: MCA1757F

BATCH NUMBER 160351

Description:	MOUSE ANTI HUMAN MYELOPEROXIDASE:FITC
Specificity:	MYELOPEROXIDASE
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	2C7
Isotype:	IgG1
Quantity:	0.1 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 (1)	▪			Neat - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code BUF09) for this purpose.**

Target Species

Human

Species Cross Reactivity

Reacts with: Dog

Does not react with:Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Human myeloperoxidase
External Database Links	**UniProt:** P05164 Related reagents **Entrez Gene:** 4353 MPO Related reagents
RRID	AB_322850
Fusion Partners	Spleen cells from immunized mice were fused with cells of the mouse X63 AG8-653 myeloma cell line
Specificity	**Mouse anti Human myeloperoxidase antibody, clone 2C7** recognizes human 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. Mouse anti Human Myeloperoxidase antibody, clone 2C7 recognizes native MPO in Western blots, and the heavy chain following boiling of the sample. Mouse anti Human Myeloperoxidase antibody, clone 2C7 also recognizes recombinant MPO in western blots and weakly in ELISA. Mouse anti Human myeloperoxidase antibody, clone 2C7 may be of value in the study of myeloid cells and myeloid leukaemias by flow cytometry following cell permeabilization. Mouse anti Human myeloperoxidase antibody, clone 2C7 did not recognize rat MPO by ELISA (Patry *et al.* 2003).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Villiers, E. *et al.* (2006) Identification of acute myeloid leukemia in dogs using flow cytometry with myeloperoxidase, MAC387, and a canine neutrophil-specific antibody. Vet Clin Pathol. 35 (1): 55-71. 2. Patry, Y.C. *et al.* (2003) Difference in antigenic determinant profiles between human and rat myeloperoxidase. Clin Exp Immunol. 132 (3): 505-8. 3. Zhang, N. *et al.* (2008) Different types of T-effector cells orchestrate mucosal inflammation in chronic sinus disease. J Allergy Clin Immunol. 122: 961-8. 4. Sloane, A.J. *et al.* (2005) Proteomic analysis of sputum from adults and children with

cystic fibrosis and from control subjects. Am J Respir Crit Care Med. 172: 1416-26.
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6. Behnen, M. *et al.* (2014) Immobilized immune complexes induce neutrophil extracellular trap release by human neutrophil granulocytes via FcγRIIIB and Mac-1. J Immunol. 193 (4): 1954-65.
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9. Wang, H. *et al.* (2016) Circulating Level of Neutrophil Extracellular Traps Is Not a Useful Biomarker for Assessing Disease Activity in Antineutrophil Cytoplasmic Antibody-Associated Vasculitis. PLoS One. 11 (2): e0148197.
10. Rai, A.K. *et al.* (2017) Exonal switch down-regulates the expression of CD5 on blasts of acute T cell leukaemia. Clin Exp Immunol. 190 (3): 340-350.
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12. Helseth, R. *et al.* (2019) Glucose associated NETosis in patients with ST-elevation myocardial infarction: an observational study. BMC Cardiovasc Disord. 19 (1): 221.
13. Hoppenbrouwers, T. *et al.* (2018) Neutrophil Extracellular Traps in Children With Meningococcal Sepsis. Pediatr Crit Care Med. 19 (6): e286-e291.
14. Manfredi, A.A. *et al.* (2021) Platelet phagocytosis via PSGL1 and accumulation of microparticles in systemic sclerosis. Arthritis Rheumatol. Jul 19 [Epub ahead of print].
15. de Moraes Mazetto, B. *et al.* (2022) Association between neutrophil extracellular traps (NETs) and thrombosis in antiphospholipid syndrome Thrombosis Res. 214: 132-7.

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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1757F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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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