Datasheet: MCA1824PE

BATCH NUMBER 169092

Description:	MOUSE ANTI HUMAN CD89:RPE
Specificity:	CD89
Other names:	Immunoglobulin alpha Fc receptor
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MIP8a
Isotype:	IgG1
Quantity:	100 TESTS

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	▪			Neat

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 appropriate negative/positive controls.

Target Species

Human

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Antibody purified from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Immunogen	Recombinant soluble human Fc alpha R.
External Database Links	**UniProt:** P24071 Related reagents **Entrez Gene:** 2204 FCAR Related reagents
Synonyms	CD89
RRID	AB_322535
Specificity	**Mouse anti Human CD89 antibody, clone MIP8a** recognizes the human CD89 cell surface antigen, a 50-75 kDa cell surface glycoprotein that is also known as the IgA receptor (Fc alpha R). CD89 is expressed by peripheral blood monocytes and neutrophils. MIP8a blocks binding of IgA to the Fc alpha R, and also inhibits neutrophil phagocytosis of IgA complexes.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood
References	1. Zhang, W. *et al.* (2000) Neutrophil lactoferrin release induced by IgA immune complexes differed from that induced by cross-linking of fcalpha receptors (FcalphaR) with a monoclonal antibody, MIP8a. Clin Exp Immunol. 121 (1): 106-11. 2. Lu, J. *et al.* (2011) Recognition and functional activation of the human IgA receptor (Fc{alpha}RI) by C-reactive protein. Proc Natl Acad Sci U S A. 108: 4974-9. 3. Duc, M. *et al.* (2010) Antigen binding to secretory immunoglobulin A results in decreased sensitivity to intestinal proteases and increased binding to cellular Fc receptors. J Biol Chem. 285: 953-60. 4. Wu, J. *et al.* (2007) FcαRI (CD89) alleles determine the proinflammatory potential of serum IgA. J Immunol. 178: 3973-82. 5. Hamre, R. *et al.* (2003) Expression and modulation of the human immunoglobulin A Fc receptor (CD89) and the FcR gamma chain on myeloid cells in blood and tissue. Scand J Immunol. 57: 506-16. 6. Qian,K. *et al.* (2008) Functional expression of IgA receptor FcalphaRI on human platelets. J Leukoc Biol. 84: 1492-500. 7. Van Egmond, M. (2011) Method for the treatment or prophylaxis of chronic inflammatory diseases. European Patent Application No: 12/736963 8. Pascal, V. *et al.* (2012) Anti-CD20 IgA can protect mice against lymphoma development: evaluation of the direct impact of IgA and cytotoxic effector recruitment on CD20 target cells. Haematologica. 97 (11): 1686-94. 9. Mladenov, R. *et al.* (2015) The Fc-alpha receptor is a new target antigen for immunotherapy of myeloid leukemia. Int J Cancer. 137 (11): 2729-38. 10. Aleyd, E. *et al.* (2016) IgA Complexes in Plasma and Synovial Fluid of Patients with Rheumatoid Arthritis Induce Neutrophil Extracellular Traps via FcαRI. J Immunol. 197 (12):

4552-9.
11. van der Steen, L. *et al.* (2009) Immunoglobulin A: Fc(alpha)RI interactions induce neutrophil migration through release of leukotriene B4. Gastroenterology. 137 (6): 2018-29.e1-3.
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13. Lu, J. *et al.* (2014) Pentraxins and IgA share a binding hot-spot on FcαRI. Protein Sci. 23 (4): 378-86.
14. Askarian, F. *et al.* (2021) The lytic polysaccharide monooxygenase CbpD promotes *Pseudomonas aeruginosa.* virulence in systemic infection. Nat Commun. 12 (1): 1230.
15. Bos, A. *et al.* (2022) Anti-FcαRI Monoclonal Antibodies Resolve IgA Autoantibody-Mediated Disease. Front Immunol. 13: 732977.
16. Stacey, H.D. *et al.* (2021) IgA potentiates NETosis in response to viral infection. Proc Natl Acad Sci U S A. 118 (27): e2101497118.

Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1824PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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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
'M419298:230616'

Printed on 23 May 2025