

Datasheet: MCA1824PE

BATCH NUMBER 170613

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	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
	5% Sucrose		

Immunogen	Recombinant soluble human Fc alpha R.
External Database Links	<p>UniProt: P24071 Related reagents</p> <p>Entrez Gene: 2204 FCAR Related reagents</p>
Synonyms	CD89
RRID	AB_322535
Specificity	<p>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).</p> <p>CD89 is expressed by peripheral blood monocytes and neutrophils.</p> <p>MIP8a blocks binding of IgA to the Fc alpha R, and also inhibits neutrophil phagocytosis of IgA complexes.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl whole blood
References	<ol style="list-style-type: none"> Zhang, W. <i>et al.</i> (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. Lu, J. <i>et al.</i> (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. Duc, M. <i>et al.</i> (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. Wu, J. <i>et al.</i> (2007) FcαRI (CD89) alleles determine the proinflammatory potential of serum IgA. J Immunol. 178: 3973-82. Hamre, R. <i>et al.</i> (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. Qian,K. <i>et al.</i> (2008) Functional expression of IgA receptor FcalphaRI on human platelets. J Leukoc Biol. 84: 1492-500. Van Egmond, M. (2011) Method for the treatment or prophylaxis of chronic inflammatory diseases. European Patent Application No: 12/736963 Pascal, V. <i>et al.</i> (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. Mladenov, R. <i>et al.</i> (2015) The Fc-alpha receptor is a new target antigen for immunotherapy of myeloid leukemia. Int J Cancer. 137 (11): 2729-38. Aleyd, E. <i>et al.</i> (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.](#)

12. 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 \(6\): 506-16.](#)

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](https://www.bio-rad-antibodies.com/datasheets)

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