

# Datasheet: MCA1824 BATCH NUMBER 150246

Description:	MOUSE ANTI HUMAN CD89		
Specificity:	CD89		
Other names:	Immunoglobulin alpha Fc receptor		
Format:	Purified		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	MIP8a		
Isotype:	lgG1		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/50 - 1/100
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA	•			
Immunoprecipitation				
Western Blotting				

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.

Target Species	Human
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

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Recombinant soluble human Fc alpha R.

## External Database Links

**UniProt:** 

P24071 Related reagents

#### **Entrez Gene:**

2204 FCAR Related reagents

#### **Synonyms**

**CD89** 

#### **RRID**

AB 322934

#### **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 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul 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. <u>Clin Exp Immunol. 121 (1): 106-11.</u>
- 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. <u>Scand J Immunol</u>. 57: 506-16.
- 6. Qian,K. *et al.* (2008) Functional expression of IgA receptor FcalphaRI on human platelets. <u>J Leukoc Biol. 84: 1492-500.</u>
- 7. Van Egmond, M. (2011) Method for the treatment or prophylaxis of chronic inflammatory diseases. <u>European Patent Application No: 12/736963</u>
- 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. <u>Haematologica</u>. 97 (11): 1686-94.
- 9. Mladenov, R. *et al.* (2015) The Fc-alpha receptor is a new target antigen for immunotherapy of myeloid leukemia. <u>Int J Cancer. 137 (11): 2729-38.</u>
- 10. Aleyd, E. *et al.* (2016) IgA Complexes in Plasma and Synovial Fluid of Patients with Rheumatoid Arthritis Induce Neutrophil Extracellular Traps via FcαRI. <u>J Immunol. 197 (12):</u>

#### 4552-9.

- 11. van der Steen, L. *et al.* (2009) Immunoglobulin A: Fc(alpha)RI interactions induce neutrophil migration through release of leukotriene B4. <u>Gastroenterology. 137 (6):</u> 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. <u>Scand J Immunol.</u> 57 (6): 506-16.
- 13. Lu, J. *et al.* (2014) Pentraxins and IgA share a binding hot-spot on FcαRI. <u>Protein Sci.</u> 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.

#### **Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1824">https://www.bio-rad-antibodies.com/SDS/MCA1824</a> 10040		
Regulatory	For research purposes only		

# Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE
Robbit Anti Mouse IgC (STAR12...)

RPE

Rabbit Anti Mouse IgG (STAR13...) HRP
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

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

#### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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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