

Datasheet: MCA1824GA

| | |
|----------------------|----------------------------------|
| Description: | MOUSE ANTI HUMAN CD89 |
| Specificity: | CD89 |
| Other names: | Immunoglobulin alpha Fc receptor |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | MIP8a |
| 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 | ▪ | | | 1/50 - 1/100 |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | ▪ | | | |
| Immunoprecipitation | ▪ | | | |
| 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 appropriate negative/positive controls.

| | |
|---------------------------------------|---|
| Target Species | Human |
| Product Form | Purified IgG - liquid |
| Preparation | Antibody purified from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% sodium azide (NaN ₃) |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |

| | |
|--------------------------------|---|
| 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_324235 |
| 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.](#)

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/MCA1824GA>
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](#)
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 \(MCA928\)](#)

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

To

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

find a

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

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

'M411690:221104'

Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)