

Datasheet: MCA2455GA

Description:	MOUSE ANTI HUMAN C3a RECEPTOR
Specificity:	C3a RECEPTOR
Other names:	COMPLEMENT COMPONENT 3a RECEPTOR 1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	hC3aRZ1
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	▪			1/10 - 1/20
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
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human C3aR protein.
External Database Links	<p>UniProt: Q16581 Related reagents</p> <p>Entrez Gene: 719 C3AR1 Related reagents</p>
Synonyms	AZ3B, C3R1, HNFAG09
RRID	AB_877450
Fusion Partners	Cells from immunised BALB/c mice were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	<p>Mouse anti Human C3a Receptor antibody, clone hC3aRZ1 recognizes the receptor for human complement component C3a (C3aR), a ~55 kDa cell surface protein of the rhodopsin family of G protein-coupled seven-transmembrane receptors. C3a is an anaphylatoxin, which is a potent proinflammatory mediator that possesses immunoregulatory properties. C3a regulates inflammatory functions by binding to the C3a receptor. C3aR is expressed on various tissues and leucocytes including basophils, neutrophils, mast cells, eosinophils and activated T lymphocytes.</p> <p>Expression levels of C3aR on human cells varies significantly between donors.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
References	<ol style="list-style-type: none"> Werfel, T. <i>et al.</i> (2000) Activated human T lymphocytes express a functional C3a receptor. J Immunol. 165 (11): 6599-605. Kacani, L. <i>et al.</i> (2001) C5a and C5a(desArg) enhance the susceptibility of monocyte-derived macrophages to HIV infection. J Immunol. 166: 3410-5. Soruri, A. <i>et al.</i> (2003) IL-4 down-regulates anaphylatoxin receptors in monocytes and dendritic cells and impairs anaphylatoxin-induced migration <i>in vivo</i>. J Immunol. 170 (6): 3306-14. Raby, A.C. <i>et al.</i> (2009) Soluble TLR2 reduces inflammation without compromising bacterial clearance by disrupting TLR2 triggering. J Immunol. 183 (1): 506-17. Schreiber, A. <i>et al.</i> (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. J Am Soc Nephrol. 20: 289-98. Martel, C. <i>et al.</i> (2011) Requirements for membrane attack complex formation and anaphylatoxins binding to collagen-activated platelets. PLoS One. 6: e18812. Török K (2012) Human T cell derived, cell-bound complement iC3b is integrally involved in T cell activation. Immunol Lett. 143: 131-6.

8. Patzelt, J. *et al.* (2015) Expression of anaphylatoxin receptors on platelets in patients with coronary heart disease. [Atherosclerosis. 238 \(2\): 289-95.](#)
9. Hengartner, N.E. *et al.* (2015) Crucial Role of IL1beta and C3a in the *In Vitro*-Response of Multipotent Mesenchymal Stromal Cells to Inflammatory Mediators of Polytrauma. [PLoS One. 10: e0116772.](#)

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/MCA2455GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (STAR76...) [RPE](#)

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

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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
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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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Printed on 27 Aug 2024