Datasheet: MCA2455A488T

Description:	MOUSE ANTI HUMAN C3a RECEPTOR:Alexa Fluor® 488
Specificity:	C3a RECEPTOR
Other names:	COMPLEMENT COMPONENT 3a RECEPTOR 1
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	hC3aRZ1
Isotype:	IgG1
Quantity:	25 TESTS/0.25ml

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	▪			

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 conjugated to Alexa Fluor®488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen

Recombinant human C3aR protein.

External Database Links

UniProt:
Q16581 Related reagents

	Entrez Gene: 719 C3AR1 Related reagents
Synonyms	AZ3B, C3R1, HNFAG09
Fusion Partners	Cells from immunised BALB/c mice were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	**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. Expression levels of C3aR on human cells varies significantly between donors.
Flow Cytometry	Use 10ul of the sugested working dilution to label 1x10^6 cells in 100ul.
References	1. Werfel, T. *et al.* (2000) Activated human T lymphocytes express a functional C3a receptor. J Immunol. 165 (11): 6599-605. 2. Soruri, A. *et al.* (2003) IL-4 down-regulates anaphylatoxin receptors in monocytes and dendritic cells and impairs anaphylatoxin-induced migration *in vivo*. J Immunol. 170 (6): 3306-14. 3. Zwirner, J. *et al.* (1999) Evaluation of C3a receptor expression on human leucocytes by the use of novel monoclonal antibodies. Immunology. 97: 166-72. 4. Kacani, L. *et al.* (2001) C5a and C5a(desArg) enhance the susceptibility of monocyte-derived macrophages to HIV infection. J Immunol. 166: 3410-5. 5. Raby, A.C. *et al.* (2009) Soluble TLR2 reduces inflammation without compromising bacterial clearance by disrupting TLR2 triggering. J Immunol. 183: 506-17. 6. Martel, C. *et al.* (2011) Requirements for membrane attack complex formation and anaphylatoxins binding to collagen-activated platelets. PLoS One. 6: e18812. 7. 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. 8. Schreiber, A. *et al.* (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. J Am Soc Nephrol. 20: 289-98. 9. Török K (2012) Human T cell derived, cell-bound complement iC3b is integrally involved in T cell activation. Immunol Lett. 143: 131-6. 10. Patzelt, J. *et al.* (2015) Expression of anaphylatoxin receptors on platelets in patients with coronary heart disease. Atherosclerosis. 238 (2): 289-95. 11. Raby, A.C. *et al.* (2009) Soluble TLR2 reduces inflammation without compromising bacterial clearance by disrupting TLR2 triggering. J Immunol. 183 (1): 506-17.
Storage	Store at +4^{o}C or at -20^{o}C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation.

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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 (MCA928A488)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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