

Datasheet: MCA2059A488

Description:	MOUSE ANTI HUMAN CD88:Alexa Fluor® 488
Specificity:	CD88
Other names:	C5aR
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	P12/1
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

Species Cross Reactivity

Reacts with: Rhesus Monkey

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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 (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	C5aR - peptide: Met ₁ - Asn ₃₁
External Database Links	<p>UniProt: P21730 Related reagents</p> <p>Entrez Gene: 728 C5AR1 Related reagents</p>
Synonyms	C5AR, C5R1
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63 - Ag8 myeloma cell line.
Specificity	<p>Mouse anti Human CD88 antibody, clone P12/1 recognizes the C5a receptor (C5aR) also known as CD88 or C5a anaphylatoxin chemotactic receptor 1. CD88 is predominantly expressed on cells of the myeloid lineage.</p> <p>When C5aR is preincubated with C5a, Mouse anti Human CD88 antibody, clone P12/1 does not bind to the receptor, as the binding site of P12/1 is located in the C5a binding region (Werfel <i>et al.</i> 1996 and Weinman <i>et al.</i> 2003)</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Werfel, T. <i>et al.</i> (1996) CD88 antibodies specifically bind to C5aR on dermal CD117+ and CD14+ cells and react with a desmosomal antigen in human skin. J Immunol. 157: 1729-35. 2. Opperman, M. <i>et al.</i> (1995) Antibodies from the myeloid panel that react with the C5a receptor and antagonize C5a biological activity. In: Schlossman, S.F. (ed.) Leucocyte Typing V. OUP: 955-6. 3. Pollok-Kopp B <i>et al.</i> (2007) Dynamics of protein kinase C-mediated phosphorylation of the complement C5a receptor on serine 334. J Biol Chem. 282 (7): 4345-53. 4. Werfel, T. <i>et al.</i> (1995) Binding of anti-C5a receptor (C5aR) antibodies to cells of clinically normal human skin. In: Schlossman, S.F. (ed.) Leucocyte Typing V. OUP: 957-9. 5. Oppermann, M. (1995) Cluster report: (C5a receptor). In: Schlossman, S.F. (ed.) Leucocyte Typing V. OUP: 953-4. 6. Hüttenrauch, F. <i>et al.</i> (2005) G protein-coupled receptor kinases promote phosphorylation and beta-arrestin-mediated internalization of CCR5 homo- and hetero-oligomers. J Biol Chem. 280: 37503-15. 7. Huber-Lang, M. <i>et al.</i> (2005) Changes in the novel orphan, C5a receptor (C5L2), during experimental sepsis and sepsis in humans. J Immunol. 174 (2): 1104-10. 8. Morris, A.C. <i>et al.</i> (2011) C5a-mediated neutrophil dysfunction is RhoA-dependent and

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14. Presicce, P. *et al.* (2015) Neutrophil recruitment and activation in decidua with intra-amniotic IL-1beta in the preterm rhesus macaque. [Biol Reprod. 92 \(2\): 56.](#)
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16. Werfel, T. *et al.* (1996) The human mast cell line HMC-1 expresses C5a receptors and responds to C5a but not to C5a(desArg). [Scand J Immunol. 44 \(1\): 30-6.](#)
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18. Hodille, E. *et al.* (2020) Staphylococcal Panton–Valentine Leucocidin and Gamma Haemolysin Target and Lyse Mature Bone Marrow Leucocytes. [Toxins. 12 \(11\): 725.](#)

Further Reading

1. Oppermann, M. *et al.* (1993) Probing the human receptor for C5a anaphylatoxin with site-directed antibodies. Identification of a potential ligand binding site on the NH₂-terminal domain. [J Immunol. 151 \(7\): 3785-94.](#)
2. Oppermann, M. & Götze, O. (1994) Plasma clearance of the human C5a anaphylatoxin by binding to leucocyte C5a receptors. [Immunology. 82 \(4\): 516-21.](#)

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. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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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 IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA929A488\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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