

Datasheet: MCA2456A647T

**BATCH NUMBER 1610**

<b>Description:</b>	RAT ANTI MOUSE CD88:Alexa Fluor® 647
<b>Specificity:</b>	CD88
<b>Other names:</b>	C5aR
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	10/92
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

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.

<b>Target Species</b>	Mouse		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide		
	1% Bovine Serum Albumin		
<b>Approx. Protein</b>	IgG concentration 0.05 mg/ml		

## Concentrations

**Immunogen** RBL-2H3 transfected cells expressing murine C5aR.

## External Database Links

### UniProt:

[P30993](#)

[Related reagents](#)

### Entrez Gene:

[12273](#)

C5ar1

[Related reagents](#)

**Synonyms** C5ar, C5r1

**RRID** AB\_1102426

**Fusion Partners** Cells from immunised Lou/c rats were fused with cells of the X63-Ag8.653 myeloma cell line.

**Specificity** **Rat anti Mouse CD88 antibody, clone 10/92** recognizes murine CD88, a 45 kDa G-protein coupled cell surface receptor, otherwise known as C5aR. The CD88 molecule functions as a receptor for the complement component C5a, a potent proinflammatory molecule and chemoattractant for neutrophils to sites of infection. In mouse, CD88 is expressed on granulocytes, monocytes and macrophages but not on resting or stimulated lymphocytes.

Rat anti Mouse CD88 antibody, clone 10/92 does not block the binding of the C5a to murine CD88 ([Souri \*et al.\* 2003](#)).

**Flow Cytometry** Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/B/C](#)).

## References

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3. Manthey, H.D. *et al.* (2011) Complement C5a inhibition reduces atherosclerosis in ApoE<sup>-/-</sup> mice. [FASEB J. 25: 2447-55.](#)
4. Cudaback, E. *et al.* (2011) Apolipoprotein E isoform-dependent microglia migration. [FASEB J. 25: 2082-91.](#)
5. Ager, R.R. *et al.* (2010) Microglial C5aR (CD88) expression correlates with amyloid-beta deposition in murine models of Alzheimer's disease. [J Neurochem. 113: 389-401](#)
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7. Li, R. *et al.* (2013) C5L2: a controversial receptor of complement anaphylatoxin, C5a. [FASEB J. 27 \(3\): 855-64.](#)

8. Denny, K.J. *et al.* (2013) C5a receptor signaling prevents folate deficiency-induced neural tube defects in mice. [J Immunol. 190 \(7\): 3493-9.](#)
9. Pavlovski, D. *et al.* (2012) Generation of complement component C5a by ischemic neurons promotes neuronal apoptosis. [FASEB J. 26 \(9\): 3680-90.](#)
10. Benson, M.J. *et al.* (2017) The effects of C5aR1 on leukocyte infiltration following pilocarpine-induced status epilepticus. [Epilepsia. 58 \(4\): e54-e58.](#)
11. Ramstead, A.G. *et al.* (2016) Roles of Toll-Like Receptor 2 (TLR2), TLR4, and MyD88 during Pulmonary *Coxiella burnetii* Infection. [Infect Immun. 84 \(4\): 940-9.](#)
12. Benson, M.J. *et al.* (2015) A novel anticonvulsant mechanism via inhibition of complement receptor C5ar1 in murine epilepsy models. [Neurobiol Dis. 76: 87-97.](#)
13. Hernandez, M.X. *et al.* (2017) C5a Increases the Injury to Primary Neurons Elicited by Fibrillar Amyloid Beta. [ASN Neuro. 9 \(1\): 1759091416687871.](#)

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	<p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a></p>
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2456A647T">https://www.bio-rad-antibodies.com/SDS/MCA2456A647T</a></p> <p>10041</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

<b>North &amp; South America</b>	<p>Tel: +1 800 265 7376</p> <p>Fax: +1 919 878 3751</p> <p>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a></p>	<b>Worldwide</b>	<p>Tel: +44 (0)1865 852 700</p> <p>Fax: +44 (0)1865 852 739</p> <p>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a></p>	<b>Europe</b>	<p>Tel: +49 (0) 89 8090 95 21</p> <p>Fax: +49 (0) 89 8090 95 50</p> <p>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a></p>
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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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