

# Datasheet: MCA2456GA

## **BATCH NUMBER 165817**

Description:	RAT ANTI MOUSE CD88
Specificity:	CD88
Other names:	C5aR
Format:	Purified
Product Type:	Monoclonal Antibody
Product Type: Clone:	Monoclonal Antibody 10/92
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# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/50 - 1/100
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation				
Western Blotting				
Immunofluorescence	•			
Functional Assays		•		

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	Mouse	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein C supernatant	G from tissue culture
Buffer Solution	Phosphate buffered saline	

Preservative Stabilisers	0.09% Sodium Azide	
Carrier Free	Yes	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
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_770091	
Fusion Partners	Cells from immunised Lou/c rats were fused with cells of the X63-Ag8.653 m line.	iyeloma cell
Specificity	Rat anti Mouse CD88 antibody, clone 10/92 recognizes murine CD88, a 48 G-protein coupled cell surface receptor, otherwise known as C5aR. The CD8 functions as a receptor for the complement component C5a, a potent proinfly molecule and chemoattractant for neutrophils to sites of infection. In mouse, expressed on granulocytes, monocytes and macrophages but not on resting lymphocytes.	38 molecule ammatory CD88 is
	Rat anti Mouse CD88 antibody, clone 10/92 does not block the binding of the murine CD88 (Souri et al. 2003).	e C5a to
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul. Method sheets available on request.	
References	<ol> <li>Soruri, A. <i>et al.</i> (2003) Characterization of C5aR expression on murine my lymphoid cells by the use of a novel monoclonal antibody. <u>Immunol Lett. 88:</u> 2. Ager, R.R. <i>et al.</i> (2010) Microglial C5aR (CD88) expression correlates with amyloid-beta deposition in murine models of Alzheimer's disease. <u>J Neuroch 389-401</u></li> <li>Shagdarsuren, E. <i>et al.</i> (2010) C5a Receptor Targeting in Neointima Form Arterial Injury in Atherosclerosis-Prone Mice. <u>Circulation. 122: 1026-36.</u></li> <li>Cudaback, E. <i>et al.</i> (2011) Apolipoprotein E isoform-dependent microgliant FASEB J. 25: 2082-91.</li> <li>Manthey, H.D. <i>et al.</i> (2011) Complement C5a inhibition reduces atheroscle ApoE-/- mice. <u>FASEB J. 25: 2447-55.</u></li> <li>Pavlovski, D. <i>et al.</i> (2012) Generation of complement component C5a by interpretation.</li> </ol>	hnem. 113: nation After migration. erosis in

neurons promotes neuronal apoptosis. FASEB J. 26 (9): 3680-90.

- 7. Denny, K.J. *et al.* (2013) C5a receptor signaling prevents folate deficiency-induced neural tube defects in mice. <u>J Immunol. 190 (7): 3493-9.</u>
- 8. Li, R. *et al.* (2013) C5L2: a controversial receptor of complement anaphylatoxin, C5a. FASEB J. 27 (3): 855-64.
- 9. Benson, M.J. *et al.* (2015) A novel anticonvulsant mechanism via inhibition of complement receptor C5ar1 in murine epilepsy models. <u>Neurobiol Dis. 76: 87-97.</u>
- 10. Brennan, F.H. *et al.* (2015) The Complement Receptor C5aR Controls Acute Inflammation and Astrogliosis following Spinal Cord Injury. <u>J Neurosci. 35 (16): 6517-31.</u>
- 11. Hernandez, M.X. *et al.* (2017) C5a Increases the Injury to Primary Neurons Elicited by Fibrillar Amyloid Beta. ASN Neuro. 9 (1): 1759091416687871.
- 12. Benson, M.J. *et al.* (2017) The effects of C5aR1 on leukocyte infiltration following pilocarpine-induced status epilepticus. <u>Epilepsia</u>. 58 (4): e54-e58.

#### 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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2456GA">https://www.bio-rad-antibodies.com/SDS/MCA2456GA</a> 10040
Regulatory	For research purposes only

## Related Products

### **Recommended Secondary Antibodies**

Goat Anti Rat IgG (STAR69...) FITC

Goat Anti Rat IgG (STAR73...) RPE

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Rabbit Anti Rat IgG (STAR21...) HRP

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>
Goat Anti Rat IgG (STAR131...) <u>Alk. Phos., Biotin</u>

Rabbit Anti Rat IgG (STAR17...) <u>FITC</u>
Goat Anti Rat IgG (STAR72...) <u>HRP</u>

# **Recommended Negative Controls**

Fax: +1 919 878 3751

RAT IgG2a NEGATIVE CONTROL (MCA1212)

North & South Tel: +1 800 265 7376

America

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

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