

Datasheet: MCA2456A488

Description:	RAT ANTI MOUSE CD88:Alexa Fluor® 488
Specificity:	CD88
Other names:	C5aR
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	10/92
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 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 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	RBL-2H3 transfected cells expressing murine C5aR.
External Database Links	<p>UniProt: P30993 Related reagents</p> <p>Entrez Gene: 12273 C5ar1 Related reagents</p>
Synonyms	C5ar, C5r1
RRID	AB_770086
Fusion Partners	Cells from immunised Lou/c rats were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	<p>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.</p> <p>Rat anti Mouse CD88 antibody, clone 10/92 does not block the binding of the C5a to murine CD88 (Souri <i>et al.</i> 2003).</p>
Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.</p> <p>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).</p>
References	<ol style="list-style-type: none"> 1. Soruri, A. <i>et al.</i> (2003) Characterization of C5aR expression on murine myeloid and lymphoid cells by the use of a novel monoclonal antibody. Immunol Lett. 88:47-52. 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. J Neurochem. 113: 389-401 3. Shagdarsuren, E. <i>et al.</i> (2010) C5a Receptor Targeting in Neointima Formation After Arterial Injury in Atherosclerosis-Prone Mice. Circulation. 122: 1026-36. 4. Cudaback, E. <i>et al.</i> (2011) Apolipoprotein E isoform-dependent microglia migration. FASEB J. 25: 2082-91. 5. Manthey, H.D. <i>et al.</i> (2011) Complement C5a inhibition reduces atherosclerosis in ApoE^{-/-} mice. FASEB J. 25: 2447-55. 6. Pavlovski, D. <i>et al.</i> (2012) Generation of complement component C5a by ischemic neurons promotes neuronal apoptosis. FASEB J. 26 (9): 3680-90. 7. Denny, K.J. <i>et al.</i> (2013) C5a receptor signaling prevents folate deficiency-induced neural tube defects in mice. J Immunol. 190 (7): 3493-9. 8. Li, R. <i>et al.</i> (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. [Neurobiol Dis. 76: 87-97.](#)
10. Brennan, F.H. *et al.* (2015) The Complement Receptor C5aR Controls Acute Inflammation and Astrogliosis following Spinal Cord Injury. [J Neurosci. 35 \(16\): 6517-31.](#)
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. [Epilepsia. 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.
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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2456A488 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA1212A488\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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