

Datasheet: MCA2456A647

Description:	RAT ANTI MOUSE CD88:Alexa Fluor® 647
Specificity:	CD88
Other names:	C5aR
Format:	ALEXA FLUOR® 647
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 - 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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 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
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 1×10^6 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	1. Soruri, A. et al. (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. Shagdarsuren, E. et al. (2010) C5a Receptor Targeting in Neointima Formation After Arterial Injury in Atherosclerosis-Prone Mice. Circulation. 122: 1026-36. 3. Manthey, H.D. et al. (2011) Complement C5a inhibition reduces atherosclerosis in ApoE^{-/-} 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 6. 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. 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 <i>Coxiella burnetii</i> 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.
Storage	Store at +4°C or at -20°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.
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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
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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