

Datasheet: MCA2456B

BATCH NUMBER 1602

Description:	RAT ANTI MOUSE CD88:Biotin
Specificity:	CD88
Other names:	C5aR
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	10/92
Isotype:	IgG2a
Quantity:	0.1 mg

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 Biotin - liquid
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 0.1 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_770084
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 et al. 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. Shagdarsuren, E. <i>et al.</i> (2010) C5a Receptor Targeting in Neointima Formation After Arterial Injury in Atherosclerosis-Prone Mice. Circulation. 122: 1026-36. 3. Manthey, H.D. <i>et al.</i> (2011) Complement C5a inhibition reduces atherosclerosis in ApoE^{-/-} mice. FASEB J. 25: 2447-55. 4. Cudaback, E. <i>et al.</i> (2011) Apolipoprotein E isoform-dependent microglia migration. FASEB J. 25: 2082-91. 5. 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 6. Brennan, F.H. <i>et al.</i> (2015) The Complement Receptor C5aR Controls Acute Inflammation and Astroglia following Spinal Cord Injury. J Neurosci. 35 (16): 6517-31. 7. Li, R. <i>et al.</i> (2013) C5L2: a controversial receptor of complement anaphylatoxin, C5a. FASEB J. 27 (3): 855-64. 8. 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. 9. Pavlovski, D. <i>et al.</i> (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.](#)

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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2456B 10041
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M366939:200529'

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