Datasheet: MCA2456

BATCH NUMBER 162184

Description:	RAT ANTI MOUSE CD88
Specificity:	CD88
Other names:	C5aR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	10/92
Isotype:	IgG2a
Quantity:	0.25 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	▪			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 G from tissue culture supernatant
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_770085
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 1x10^6 cells in 100ul. Method sheets available on request.
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. 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 3. Shagdarsuren, E. *et al.* (2010) C5a Receptor Targeting in Neointima Formation After Arterial Injury in Atherosclerosis-Prone Mice. Circulation. 122: 1026-36. 4. Cudaback, E. *et al.* (2011) Apolipoprotein E isoform-dependent microglia migration. FASEB J. 25: 2082-91. 5. Manthey, H.D. *et al.* (2011) Complement C5a inhibition reduces atherosclerosis in ApoE-/- mice. FASEB J. 25: 2447-55. 6. Pavlovski, D. *et al.* (2012) Generation of complement component C5a by ischemic

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. J Immunol. 190 (7): 3493-9.
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. 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. 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: https://www.bio-rad-antibodies.com/SDS/MCA2456 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...)	DyLight®550, DyLight®650, DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL (MCA1212)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M383963:210513'

Printed on 18 Jan 2024

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