Datasheet: MCA2457PE BATCH NUMBER 155462

Description:	RAT ANTI MOUSE CD88:RPE
Specificity:	CD88
Other names:	C5aR
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	20/70
Isotype:	lgG2b
Quantity:	100 TESTS

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 <u>www.bio-</u> rad-antibodies.com/protocols.					
	Yes No Not Determined Suggested Dilution					
	Flow Cytometry	-			Neat - 1/10	
	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.				dilutions are given as	
Target Species	Mouse					
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized					
Reconstitution	Reconstitute with 1 ml distilled water					
Max Ex/Em	Fluorophore	Excitation Max	k (nm) Er	nission Max (nm)		
	RPE 488nm laser	496		578		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant					
Buffer Solution	Phosphate buffered sa	lline				
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum A	Albumin				

	5% Sucrose
Immunogen	RBL-2H3 transfected cells expressing murine C5aR.
External Database Links	UniProt: <u>P30993</u> <u>Related reagents</u> Entrez Gene: <u>12273</u> C5ar1 <u>Related reagents</u>
Synonyms	C5ar, C5r1
RRID	AB_808487
Fusion Partners	Cells from immunised Lou/c were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	Rat anti Mouse CD88 antibody, clone 20/70 recognizes murine CD88, also known as C5a anaphylatoxin chemotactic receptor 1 (C5aR1), a member of the <u>G-protein coupled</u> receptor 1 family. CD88 is a ~45 kDa multi pass membrane protein and functions as a receptor for the complement component C5a, a potent proinflammatory molecule and a 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 20/70 is able to block the binding of the C5a to murine CD88, (Soruri <i>et al.</i> 2003).
Flow Cytometry	Use 10ul of the suggested working dilution to label 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 (<u>BUF041A/B</u>).
References	 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. <u>Immunol Lett. 88 (1): 47-52.</u> Godau, J. <i>et al.</i> (2004) C5a initiates the inflammatory cascade in immune complex peritonitis. <u>J Immunol. 173 (5): 3437-45.</u> Baelder, R. <i>et al.</i> (2005) Pharmacological targeting of anaphylatoxin receptors during the effector phase of allergic asthma suppresses airway hyperresponsiveness and airway inflammation. <u>J Immunol. 174 (2): 783-9.</u> Rittirsch, D. <i>et al.</i> (2008) Functional roles for C5a receptors in sepsis. <u>Nat Med. 14: 551-7.</u> Shushakova, N. (2002) C5a anaphylatoxin is a major regulator of activating versus inhibitory FcgammaRs in immune complex-induced lung disease. <u>J Clin Invest. 110: 1823-30.</u> Wang, R. <i>et al.</i> (2013) Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis. <u>J Immunol. 191: 4001-9.</u> Karsten, C.M. <i>et al.</i> (2015) Monitoring and cell-specific deletion of C5aR1 using a novel floxed GFP-C5aR1 reporter knock-in mouse. <u>J Immunol. 194 (4): 1841-55.</u>

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	regeneration in an in vitro 3D oral mucosa model. Biosci Biotechnol Biochem. 11: 1-		
	9. Wang R <i>et al.</i> (2016) C5L2, the Second C5a Anaphylatoxin Receptor Suppresses		
	Lipopolysaccharide-induced Acute Lung Injury. Am J Respir Cell Mol Biol. Jun 10. [Ep		
	ahead of print]		
	10. Ender F et al. (2017) Differential regulation of C5a receptor 1 in innate immune cells		
	during the allergic asthma effector phase. PLoS One. 12 (2): e0172446.		
	11. Fusakio, M.E. <i>et al.</i> (2011) C5a regulates NKT and NK cell functions in sepsis. J		
	Immunol. 187 (11): 5805-12.		
	12. Hoffmann, F.M. et al. (2018) Distribution and Interaction of Murine Pulmonary		
	Phagocytes in the Naive and Allergic Lung. Front Immunol. 9: 1046.		
Storage	Store at +4°C. DO NOT FREEZE.		
	This product should be stored undiluted. This product is photosensitive and should be		
	protected from light. Should this product contain a precipitate we recommend		
	microcentrifugation before use.		
Guarantee	12 months from date of despatch		
Health And Safety	Material Safety Datasheet documentation #20487 available at:		
Information	https://www.bio-rad-antibodies.com/SDS/MCA2457PE		
	20487		
Regulatory	For research purposes only		

Related Products

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A))
MOUSE SEROBLOCK FcR (BUF041B))

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		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 'M375497:210104'

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