

## Datasheet: MCA1283F

Description:	MOUSE ANTI HUMAN CD88:FITC	
Specificity:	CD88	
Other names:	C5aR	
Format:	FITC	
Product Type:	Monoclonal Antibody	
Clone:	S5/1	
lsotype:	lgG2a	
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 <u>www.bio-rad-antibodies.com/protocols</u> .				
	· · ·	Yes No	Not Determined	Suggested Dilution	
	Flow Cytometry	-		Neat	
	Where this product ha	as not been tested t	or use in a particular tech	nnique this does not	
	necessarily exclude its use in such procedures. Suggested working dilutions are g a guide only. It is recommended that the user titrates the product for use in their o system using appropriate negative/positive controls.				
Target Species	Human				
Species Cross Reactivity	Reacts with: Rabbit, Bovine, Ferret, Mink Based on sequence similarity, is expected to react with:Mustelid <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.				
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid				
Max Ex/Em	Fluorophore FITC	Excitation Max (n 490	n) Emission Max (nm) 525		
Preparation	Purified IgG prepared supernatant	by affinity chromat	ography on Protein A froi	m tissue culture	

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	C5aR - peptide: Met1 - Asn31.
External Database Links	UniProt:         P21730       Related reagents         Entrez Gene:         728       C5AR1       Related reagents
Synonyms	C5AR, C5R1
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag8 myeloma cell line.
Specificity	Mouse anti Human CD88 antibody, clone S5/1 recognizes the C5a receptor (C5aR) CD88, which is predominantly expressed on cells of the myeloid lineage. Clone S5/1 was raised against a synthetic peptide comprising the N-terminal extracellular domain of the C5aR (met1-Asn31) and has recently been shown to recognise the heptameric peptide (D15DKDTLD21). Clone S5/1 has been shown to inhibit the binding of C5a to its receptor.
Flow Cytometry	Use 10µl of the suggested working dilution to label $1x10^6$ cells in $100µl$
References	<ol> <li>Oppermann, M. &amp; Götze, O. (1994) Plasma clearance of the human C5a anaphylatoxin by binding to leucocyte C5a receptors. <u>Immunology. 82 (4): 516-21.</u></li> <li>Oppermann, M. <i>et al.</i> (1995) Antibodies from the myeloid panel that react with the C5a receptor and antagonize C5a biological activity. In: Schlossman, S.F. (ed.) Leucocyte Typing V. O.U.P. pp 955-956.</li> <li>Werfel, T. <i>et al.</i> (1996) CD88 antibodies specifically bind to C5aR on dermal CD117+ and CD14+ cells and react with a desmosomal antigen in human skin. <u>J Immunol. 157 (4):</u> <u>1729-35.</u></li> <li>Thivierge, M. <i>et al.</i> (1999) Modulation of formyl peptide receptor expression by IL-10 in human monocytes and neutrophils. <u>J Immunol. 162: 3590-5.</u></li> <li>Eglite, S. <i>et al.</i> (2000) Requirements for C5a receptor-mediated IL-4 and IL-13 production and leukotriene C4 generation in human basophils. <u>J Immunol. 165: 2183-9.</u></li> <li>Kraft, K. <i>et al.</i> (2001) Characterization of sequence determinants within the carboxyl- terminal domain of chemokine receptor CCR5 that regulate signaling and receptor internalization. <u>J Biol Chem. 276: 34408-18.</u></li> <li>Sumichika, H. <i>et al.</i> (2002) Identification of a potent and orally active non-peptide C5a</li> </ol>

	<ul> <li>receptor antagonist. <u>J Biol Chem. 277: 49403-7.</u></li> <li>8. Huang, L. <i>et al.</i> (2005) Discovery of human antibodies against the C5aR target using phage display technology. <u>J Mol Recognit.18: 327-33.</u></li> <li>9. Hüttenrauch, F. <i>et al.</i> (2005) G protein-coupled receptor kinases promote phosphorylation and beta-arrestin-mediated internalization of CCR5 homo- and heterooligomers. <u>J Biol Chem. 280: 37503-15.</u></li> <li>10. Aasted, B. and Viuff, B. (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. <u>Vet Immunol Immunopathol. 119: 27-37.</u></li> <li>11. Sopp, P. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. <u>Vet Immunol Immunopathol. 119: 106-14.</u></li> <li>12. Fukuoka, Y. <i>et al.</i> (2008) Generation of anaphylatoxins by human beta-tryptase from C3. C4, and C5. <u>J Immunol. 180: 6307-16.</u></li> <li>13. Schreiber, A. <i>et al.</i> (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. <u>J Am Soc Nephrol. 20: 289-98.</u></li> <li>14. Conroy, A. <i>et al.</i> (2009) C5a enchance dysregulated inflammatory and angiogenic responses to malaria in vitro: potential implications for placental malaria. PLoS One. 4: e4953.</li> <li>15. Martel, C.J. &amp; Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. <u>Vet Immunol Immunopathol. 132:109-15.</u></li> <li>16. Camous, L. <i>et al.</i> (2012) Anaphylatoxin C5a Creates a Favorable Microenvironment for Lung Cancer Progression. J Immunol. 189: 4674-83.</li> <li>18. Tseng CW <i>et al.</i> (2015) Increased Susceptibility of Humanized NSG Mice to Panton-Valentine Leukocidin and <i>Staphylococcus aureus</i> Skin Infection. <u>PLoS Pathog. 11 (11): e1005292.</u></li> <li>19. Bettoni, S. <i>et al.</i> (2017) Interaction between Multimeric von Willebrand Factor and Complement: A Fresh Look to the Pathophysiology of Microvascular Thrombosis. J Immunol. 19 (3): 1021-40.</li> <li>20. Tromp, A.T. <i>et al.</i> (2020) Host-Receptor Post-Translational Modifications Refine Staphy</li></ul>
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. This product is photosensitive and should be protected from light.
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/MCA1283F 10041

## **Related Products Recommended Negative Controls** MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F) **Recommended Useful Reagents** HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B) North & South Tel: +1 800 265 7376 Worldwide Tel: +44 (0)1865 852 700 Tel: +49 (0) 89 8090 95 21 Europe 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 'M409059:221017'

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