

## Datasheet: MCA1283EL

<b>Description:</b>	MOUSE ANTI HUMAN CD88:Low Endotoxin
<b>Specificity:</b>	CD88
<b>Other names:</b>	C5aR
<b>Format:</b>	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	S5/1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.5 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/200
Immunohistology - Frozen		▪		
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation		▪		
Western Blotting			▪	
Functional Assays	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Rabbit, Bovine, Ferret, Mink</p> <p>Based on sequence similarity, is expected to react with:Mustelid</p> <p><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.</p>
<b>Product Form</b>	Purified IgG - liquid

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Endotoxin Level</b>	<0.01 EU/μg
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	C5aR - peptide: Met1 - Asn31.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P21730</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">728</a>    C5AR1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	C5AR, C5R1
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag8 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD88 antibody, clone S5/1</b> 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).</p> <p>Clone S5/1 has been shown to inhibit the binding of C5a to its receptor.</p>
<b>Flow Cytometry</b>	Use 10μl of the suggested working dilution to label 5 x 10 <sup>5</sup> cells in 100μl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Oppermann, M. &amp; Götze, O. (1994) Plasma clearance of the human C5a anaphylatoxin by binding to leucocyte C5a receptors. <a href="#">Immunology. 82 (4): 516-21.</a></li> <li>2. 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>3. 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. <a href="#">J Immunol. 157 (4): 1729-35.</a></li> <li>4. Thivierge, M. <i>et al.</i> (1999) Modulation of formyl peptide receptor expression by IL-10 in human monocytes and neutrophils. <a href="#">J Immunol. 162: 3590-5.</a></li> </ol>

5. Eglite, S. *et al.* (2000) Requirements for C5a receptor-mediated IL-4 and IL-13 production and leukotriene C4 generation in human basophils. [J Immunol. 165: 2183-9.](#)
6. Kraft, K. *et al.* (2001) Characterization of sequence determinants within the carboxyl-terminal domain of chemokine receptor CCR5 that regulate signaling and receptor internalization. [J Biol Chem. 276: 34408-18.](#)
7. Sumichika, H. *et al.* (2002) Identification of a potent and orally active non-peptide C5a receptor antagonist. [J Biol Chem. 277: 49403-7.](#)
8. Huang, L. *et al.* (2005) Discovery of human antibodies against the C5aR target using phage display technology. [J Mol Recognit. 18: 327-33.](#)
9. Hüttenrauch, F. *et al.* (2005) G protein-coupled receptor kinases promote phosphorylation and beta-arrestin-mediated internalization of CCR5 homo- and hetero-oligomers. [J Biol Chem. 280: 37503-15.](#)
10. Aasted, B. and Viuff, B. (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. [Vet Immunol Immunopathol. 119: 27-37.](#)
11. Sopp, P. *et al.* (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. [Vet Immunol Immunopathol. 119: 106-14.](#)
12. Fukuoka, Y. *et al.* (2008) Generation of anaphylatoxins by human beta-tryptase from C3, C4, and C5. [J Immunol. 180: 6307-16.](#)
13. Schreiber, A. *et al.* (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. [J Am Soc Nephrol. 20: 289-98.](#)
14. Conroy, A. *et al.* (2009) C5a enhances dysregulated inflammatory and angiogenic responses to malaria in vitro: potential implications for placental malaria. [PLoS One. 4: e4953.](#)
15. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132:109-15.](#)
16. Camous, L. *et al.* (2011) Complement alternative pathway acts as a positive feedback amplification of neutrophil activation. [Blood. 117: 1340-9.](#)
17. Corrales, L. *et al.* (2012) Anaphylatoxin C5a Creates a Favorable Microenvironment for Lung Cancer Progression. [J Immunol. 189: 4674-83.](#)
18. Tseng CW *et al.* (2015) Increased Susceptibility of Humanized NSG Mice to Panton-Valentine Leukocidin and *Staphylococcus aureus* Skin Infection. [PLoS Pathog. 11 \(11\): e1005292.](#)
19. Bettoni, S. *et al.* (2017) Interaction between Multimeric von Willebrand Factor and Complement: A Fresh Look to the Pathophysiology of Microvascular Thrombosis. [J Immunol. 199 \(3\): 1021-40.](#)
20. Tromp, A.T. *et al.* (2020) Host-Receptor Post-Translational Modifications Refine Staphylococcal Leukocidin Cytotoxicity. [Toxins \(Basel\). 12 \(2\): 106.](#)
21. He, J. *et al.* (2023) TPST2-mediated receptor tyrosine sulfation enhances leukocidin cytotoxicity and *S. aureus* infection. [Front Immunol. 14: 1242330.](#)

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**Storage**

Store at -20°C only.  
 This product should be stored undiluted.  
 Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10162 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1283EL>  
10162

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),  
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA929EL\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://www.bio-rad-antibodies.com/datasheets)  
'M409057:221017'

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