

Datasheet: MCA1283

BATCH NUMBER 150830

Description:	MOUSE ANTI HUMAN CD88
Specificity:	CD88
Other names:	C5aR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	S5/1
Isotype:	IgG2a
Quantity:	0.2 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	▪			
Functional Assays (1)	▪			

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.

(1) **Bio-Rad recommend the use of [MCA1283EL](#) for functional studies.**

Target Species

Human

Species Cross Reactivity

Reacts with: Rabbit, Bovine, Ferret, Mink

Based on sequence similarity, is expected to react with: Mustelid

N.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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	C5aR - peptide: Met1 - Asn31.
External Database Links	<p>UniProt: P21730 Related reagents</p> <p>Entrez Gene: 728 C5AR1 Related reagents</p>
Synonyms	C5AR, C5R1
RRID	AB_321883
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag8 myeloma cell line.
Specificity	<p>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).</p> <p>Clone S5/1 has been shown to inhibit the binding of C5a to its receptor.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 5 x 10 ⁵ cells in 100ul.
References	<ol style="list-style-type: none"> 1. 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. 2. Oppermann, M. & Götze, O. (1994) Plasma clearance of the human C5a anaphylatoxin by binding to leucocyte C5a receptors. Immunology. 82 (4): 516-21. 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. J Immunol. 157 (4): 1729-35. 4. Sumichika, H. <i>et al.</i> (2002) Identification of a potent and orally active non-peptide C5a

- receptor antagonist. [J Biol Chem. 277: 49403-7.](#)
5. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132:109-15.](#)
 6. Sopp, P. *et al.* (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. [Vet Immunol Immunopathol. 119: 106-14.](#)
 7. Camous, L. *et al.* (2011) Complement alternative pathway acts as a positive feedback amplification of neutrophil activation. [Blood. 117: 1340-9.](#)
 8. Corrales, L. *et al.* (2012) Anaphylatoxin C5a Creates a Favorable Microenvironment for Lung Cancer Progression. [J Immunol. 189: 4674-83.](#)
 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. Thivierge, M. *et al.* (1999) Modulation of formyl peptide receptor expression by IL-10 in human monocytes and neutrophils. [J Immunol. 162: 3590-5.](#)
 12. Schreiber, A. *et al.* (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. [J Am Soc Nephrol. 20: 289-98.](#)
 13. 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.](#)
 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. 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.](#)
 16. Fukuoka, Y. *et al.* (2008) Generation of anaphylatoxins by human beta-tryptase from C3, C4, and C5. [J Immunol. 180: 6307-16.](#)
 17. 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.](#)
 18. Huang, L. *et al.* (2005) Discovery of human antibodies against the C5aR target using phage display technology. [J Mol Recognit. 18: 327-33.](#)
 19. 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.](#)

Storage

Store at +4°C or at -20°C if preferred.

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.

Guarantee

12 months from date of despatch

Health And Safety

Material Safety Datasheet documentation #10040 available at:

Information <https://www.bio-rad-antibodies.com/SDS/MCA1283>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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](https://www.bio-rad-antibodies.com/datasheets)
'M365087:200529'

Printed on 16 May 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)