

Datasheet: MCA1283T

Description:	MOUSE ANTI HUMAN CD88
Specificity:	CD88
Other names:	C5aR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	S5/1
Isotype:	IgG2a
Quantity:	25 µg

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.
Product Form	Ig fraction - liquid
Preparation	Ig fraction prepared by ammonium sulphate precipitation
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes

Approx. Protein Concentrations	Ig concentration 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 10ul of the suggested working dilution to label 5×10^5 cells in 100ul.
References	1. Oppermann, M. <i>et al.</i> (1993) Probing the human receptor for C5a anaphylatoxin with site-directed antibodies. Identification of a potential ligand binding site on the NH2-terminal domain. J Immunol. 151: 3785-94. 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. 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. Oppermann, M. & Götze, O. (1994) Plasma clearance of the human C5a anaphylatoxin by binding to leucocyte C5a receptors. Immunology. 82 (4): 516-21. 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. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. Vet Immunol Immunopathol. 119: 106-14. 7. Camous, L. <i>et al.</i> (2011) Complement alternative pathway acts as a positive feedback amplification of neutrophil activation. Blood. 117: 1340-9. 8. Corrales, L. <i>et al.</i> (2012) Anaphylatoxin C5a Creates a Favorable Microenvironment for Lung Cancer Progression. J Immunol. 189: 4674-83. 9. Hüttenrauch, F. <i>et al.</i> (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. 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. 11. Thivierge, M. <i>et al.</i> (1999) Modulation of formyl peptide receptor expression by IL-10 in human monocytes and neutrophils. J Immunol. 162: 3590-5. 12. Schreiber, A. <i>et al.</i> (2009) C5a receptor mediates neutrophil activation and ANCA-induced glomerulonephritis. J Am Soc Nephrol. 20: 289-98. 13. 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. [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. Aasted, B. and Viuff, B. (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. [Vet Immunol Immunopathol. 119: 27-37.](#)
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 Pantone-Valentine Leukocidin and *Staphylococcus aureus* Skin Infection. [PLoS Pathog. 11 \(11\): e1005292.](#)
20. 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.](#)

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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

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 'M315231:180503'	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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Printed on 17 May 2018

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