Datasheet: MCA1283PE

Description:	MOUSE ANTI HUMAN CD88:RPE
Specificity:	CD88
Other names:	C5aR
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	S5/1
Isotype:	IgG2a
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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.

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

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water
Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin
5% Sucrose

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 $1x10^6$ cells in 100ul
References	1. Oppermann, M. *et al.* (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. *et al.* (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. *et al.* (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. *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. Sumichika, H. *et al.* (2002) Identification of a potent and orally active non-peptide C5a receptor antagonist. J Biol Chem. 277: 49403-7. 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. 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 Panton-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	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
Shelf Life	12 months from date of reconstitution
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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

'M305209:170426'

Printed on 17 May 2018

© 2018 Bio-Rad Laboratories Inc | Legal | Imprint