

Datasheet: MCA2457GA

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| Description: | RAT ANTI MOUSE CD88 |
| Specificity: | CD88 |
| Other names: | C5aR |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | 20/70 |
| Isotype: | IgG2b |
| 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 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 | | | ▪ | |

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.

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| Target Species | Mouse |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide |

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| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | RBL-2H3 transfected cells expressing murine C5aR. |
| External Database Links | <p>UniProt: P30993 Related reagents</p> <p>Entrez Gene: 12273 C5ar1 Related reagents</p> |
| Synonyms | C5ar, C5r1 |
| RRID | AB_770088 |
| Fusion Partners | Cells from immunised Lou/c were fused with cells of the X63-Ag8.653 myeloma cell line. |
| Specificity | <p>Rat anti Mouse CD88 antibody, clone 20/70 recognizes murine CD88, also known as C5a anaphylatoxin chemotactic receptor 1 (C5aR1), a member of the G-protein coupled receptor 1 family. CD88 is a ~45 kDa multi pass membrane protein and functions as a receptor for the complement component C5a, a potent proinflammatory molecule and a chemoattractant for neutrophils to sites of infection. In mouse, CD88 is expressed on granulocytes, monocytes and macrophages but not on resting or stimulated lymphocytes.</p> <p>Rat anti Mouse CD88 antibody, clone 20/70 is able to block the binding of the C5a to murine CD88, (Soruri et al. 2003).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> Soruri, A. <i>et al.</i> (2003) Characterization of C5aR expression on murine myeloid and lymphoid cells by the use of a novel monoclonal antibody. Immunol Lett. 88 (1): 47-52. Godau, J. <i>et al.</i> (2004) C5a initiates the inflammatory cascade in immune complex peritonitis. J Immunol. 173 (5): 3437-45. Baelder, R. <i>et al.</i> (2005) Pharmacological targeting of anaphylatoxin receptors during the effector phase of allergic asthma suppresses airway hyperresponsiveness and airway inflammation. J Immunol. 174 (2): 783-9. Rittirsch, D. <i>et al.</i> (2008) Functional roles for C5a receptors in sepsis. Nat Med. 14: 551-7. Shushakova, N. (2002) C5a anaphylatoxin is a major regulator of activating versus inhibitory FcγR3s in immune complex-induced lung disease. J Clin Invest. 110: 1823-30. Wang, R. <i>et al.</i> (2013) Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis. J Immunol. 191: 4001-9. Karsten, C.M. <i>et al.</i> (2015) Monitoring and cell-specific deletion of C5aR1 using a novel floxed GFP-C5aR1 reporter knock-in mouse. J Immunol. 194 (4): 1841-55. |

8. Uenoyama, A. *et al.* (2016) Effects of C-xylopyranoside derivative on epithelial regeneration in an in vitro 3D oral mucosa model. [Biosci Biotechnol Biochem. 11: 1-12.](#)
9. Wang R *et al.* (2016) C5L2, the Second C5a Anaphylatoxin Receptor Suppresses Lipopolysaccharide-induced Acute Lung Injury. [Am J Respir Cell Mol Biol. Jun 10. \[Epub ahead of print\]](#)
10. Ender F *et al.* (2017) Differential regulation of C5a receptor 1 in innate immune cells during the allergic asthma effector phase. [PLoS One. 12 \(2\): e0172446.](#)
11. Fusakio, M.E. *et al.* (2011) C5a regulates NKT and NK cell functions in sepsis. [J Immunol. 187 \(11\): 5805-12.](#)
12. Hoffmann, F.M. *et al.* (2018) Distribution and Interaction of Murine Pulmonary Phagocytes in the Naive and Allergic Lung. [Front Immunol. 9: 1046.](#)

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| Storage | Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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 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

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| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR69...) | FITC |
| Goat Anti Rat IgG (STAR131...) | Alk. Phos., Biotin |
| Goat Anti Rat IgG (STAR73...) | RPE |
| Rabbit Anti Rat IgG (STAR21...) | HRP |
| Rabbit Anti Rat IgG (STAR16...) | DyLight@800 |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | DyLight@800 |
| Goat Anti Rat IgG (STAR72...) | HRP |

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| 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 |
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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)

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