

## Datasheet: MCA2457GA

**BATCH NUMBER 150829**

<b>Description:</b>	RAT ANTI MOUSE CD88
<b>Specificity:</b>	CD88
<b>Other names:</b>	C5aR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	20/70
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://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.

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

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	RBL-2H3 transfected cells expressing murine C5aR.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P30993</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">12273</a>    C5ar1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	C5ar, C5r1
<b>RRID</b>	AB_770088
<b>Fusion Partners</b>	Cells from immunised Lou/c were fused with cells of the X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD88 antibody, clone 20/70</b> recognizes murine CD88, also known as C5a anaphylatoxin chemotactic receptor 1 (C5aR1), a member of the <a href="#">G-protein coupled receptor</a> 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, (<a href="#">Soruri et al. 2003</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>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. <a href="#">Immunol Lett. 88 (1): 47-52.</a></li> <li>Godau, J. <i>et al.</i> (2004) C5a initiates the inflammatory cascade in immune complex peritonitis. <a href="#">J Immunol. 173 (5): 3437-45.</a></li> <li>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. <a href="#">J Immunol. 174 (2): 783-9.</a></li> <li>Rittirsch, D. <i>et al.</i> (2008) Functional roles for C5a receptors in sepsis. <a href="#">Nat Med. 14: 551-7.</a></li> <li>Shushakova, N. (2002) C5a anaphylatoxin is a major regulator of activating versus inhibitory FcγR3s in immune complex-induced lung disease. <a href="#">J Clin Invest. 110: 1823-30.</a></li> <li>Wang, R. <i>et al.</i> (2013) Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis. <a href="#">J Immunol. 191: 4001-9.</a></li> <li>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. <a href="#">J Immunol. 194 (4): 1841-55.</a></li> </ol>

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.](#)

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2457GA">https://www.bio-rad-antibodies.com/SDS/MCA2457GA</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

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'M366942:200529'

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