

Datasheet: MCA2457GA

BATCH NUMBER 161718

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.

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

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"> Shushakova, N. (2002) C5a anaphylatoxin is a major regulator of activating versus inhibitory FcγR in immune complex-induced lung disease. J Clin Invest. 110: 1823-30. Soruri, A. et al. (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. et al. (2004) C5a initiates the inflammatory cascade in immune complex peritonitis. J Immunol. 173 (5): 3437-45. Baelder, R. et al. (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. et al. (2008) Functional roles for C5a receptors in sepsis. Nat Med. 14: 551-7. Fusakio, M.E. et al. (2011) C5a regulates NKT and NK cell functions in sepsis. J Immunol. 187 (11): 5805-12. Wang, R. et al. (2013) Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis. J Immunol. 191: 4001-9.

8. Karsten, C.M. *et al.* (2015) Monitoring and cell-specific deletion of C5aR1 using a novel floxed GFP-C5aR1 reporter knock-in mouse. [J Immunol. 194 \(4\): 1841-55.](#)
9. Wang, R. *et al.* (2016) C5L2, the Second C5a Anaphylatoxin Receptor, Suppresses LPS-Induced Acute Lung Injury. [Am J Respir Cell Mol Biol. 55 \(5\): 657-66.](#)
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. Hoffmann, F.M. *et al.* (2018) Distribution and Interaction of Murine Pulmonary Phagocytes in the Naive and Allergic Lung. [Front Immunol. 9: 1046.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2457GA>
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Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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