

Datasheet: MCA2457GA

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**

UniProt:

[P30993](#) [Related reagents](#)

Entrez Gene:

[12273](#) C5ar1 [Related reagents](#)

Synonyms

C5ar, C5r1

Fusion Partners

Cells from immunised Lou/c were fused with cells of the X63-Ag8.653 myeloma cell line.

Specificity

Rat anti Mouse CD88 antibody, clone 2070 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.

Clone 2070 has been reported to block the binding of the C5a to murine CD88, ([Soruri *et al.* 2003](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. 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.](#)
2. Godau, J. *et al.* (2004) C5a initiates the inflammatory cascade in immune complex peritonitis. [J Immunol. 173 \(5\): 3437-45.](#)
3. 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.](#)
4. Rittirsch, D. *et al.* (2008) Functional roles for C5a receptors in sepsis. [Nat Med. 14: 551-7.](#)
5. Shushakova, N. (2002) C5a anaphylatoxin is a major regulator of activating versus inhibitory FcγR1s in immune complex-induced lung disease. [J Clin Invest. 110: 1823-30.](#)
6. Wang, R. *et al.* (2013) Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis. [J Immunol. 191: 4001-9.](#)
7. 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.](#)
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.](#)

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.

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

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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