

Datasheet: MCA2387PET

Description:	RAT ANTI MOUSE Gr-1:RPE
Specificity:	Gr-1
Other names:	Ly-6G
Format:	RPE
Product Type:	Monoclonal Antibody
Product Type: Clone:	Monoclonal Antibody RB6-8C5
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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 - 1/5

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 conjugated to R. Phycoerythrin (RPE) - lyophilized			
Reconstitution	Reconstitute in 0.25 ml disilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared	I by affinity chromatog	raphy on Protein G fror
Buffer Solution	Phosphate buffered s	aline	
reservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum	Albumin	
	5% Sucrose		
mmunogen	Normal murine bone marrow cells.		
External Database	UniDrot		

Links

UniProt:

P35461 Related reagents

Entrez Gene:

546644 Ly6g Related reagents

Specificity

Rat anti Mouse Gr-1 antibody, clone RB6-8C5 recognizes the mouse Gr-1 antigen, a ~21–25 kDa GPI anchored cell surface protein bearing a single uPAR/Ly6 domain that belongs to the Ly-6 family of proteins (Lee et al. 2013). Rat anti Mouse Gr-1 antibody, clone RB6-8C5 reacts predominantly with the Ly-6G protein but weaker reactivity with the Ly-6C protein has been reported (Fleming et al. 1993). However, other observations dispute the cross-reactivity of clone RB6-8C5 with the Ly-6C protein with the alternative explanation that certain sub-populations of bone marrow cells simultaneously express both Ly-6C and Ly-6G (Nagendra et al. 2007)

The Gr-1 antigen is primarily a marker of myeloid differentiation. In the bone marrow the level of Gr-1 expression is low on immature myeloblasts and increases as the myeloid cells mature to granulocytes. Gr-1 is also expressed on macrophages and transiently on differentiating monocytes.

Rat anti Mouse Gr-1 antibody, clone RB6-8C5 has been used successfully for the depletion of mature neutrophils *in vivo* (Czuprynski et al 1994, Daley et al. 2008).

Flow Cytometry

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

References

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- 2. Hestdal, K. *et al.* (1991) Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. J Immunol. 147 (1): 22-8.
- 3. Czuprynski, C.J. *et al.* (1994) Administration of anti-granulocyte mAb RB6-8C5 impairs the resistance of mice to *Listeria monocytogenes* infection. J Immunol. 152 (4): 1836-46.
- 4. Sumagin R *et al.* (2010) LFA-1 and Mac-1 define characteristically different intralumenal crawling and emigration patterns for monocytes and neutrophils *in situ*. <u>J Immunol</u>. 185 (11): 7057-66.
- 5. Takano, K. *et al.* (2011) Successful treatment of acute lung injury with pitavastatin in septic mice: potential role of glucocorticoid receptor expression in alveolar macrophages. <u>J Pharmacol Exp Ther. 336: 381-90.</u>
- 6. Giroux, M. *et al.* (2011) SMAD3 prevents graft-versus-host disease by restraining Th1 differentiation and granulocyte-mediated tissue damage. <u>Blood.117: 1734-44.</u>
- 7. Suttmann, H. *et al.* (2006) Neutrophil granulocytes are required for effective Bacillus Calmette-Guérin immunotherapy of bladder cancer and orchestrate local immune responses. <u>Cancer Res.</u> 66: 8250-7.
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- 15. Roche, J.A. *et al.* (2015) Myofiber damage precedes macrophage infiltration after *in vivo* injury in dysferlin-deficient a/j mouse skeletal muscle. Am J Pathol. 185 (6): 1686-98.
- 16. Lee, Y.S. *et al.* (2015) Interleukin-1 (IL-1) signaling in intestinal stromal cells controls KC/ CXCL1 secretion, which correlates with recruitment of IL-22- secreting neutrophils at early stages of *Citrobacter rodentium* infection. Infect Immun. 83 (8): 3257-67.
- 17. Heckelsmiller, K. *et al.* (2002) Combined dendritic cell- and CpG oligonucleotide-based immune therapy cures large murine tumors that resist chemotherapy. <u>Eur J Immunol. 32 (11): 3235-45.</u>
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- 22. Wang, Y. *et al.* (2015) Proximal tubule-derived colony stimulating factor-1 mediates polarization of renal macrophages and dendritic cells, and recovery in acute kidney injury. <u>Kidney Int. 88 (6):</u> 1274-1282.
- 23. Cousins, F.L. *et al.* (2016) Evidence for a dynamic role for mononuclear phagocytes during endometrial repair and remodelling. <u>Sci Rep. 6: 36748.</u>
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Storage Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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 Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

North & South Tel: +1 800 265 7376

America

Fax: +1 919 878 3751

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