

# Datasheet: MCA2387PET

T ANTI MOUSE Gr-1:RPE
-1
1
-6G
Έ
noclonal Antibody
6-8C5
G2b
TESTS

## **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.							
	Flow Outomatry	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 recommended that the user titrates the antibody for use in their own system using appropriat negative/positive controls.							
Target Species	Mouse							
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - Iyophilized							
Reconstitution	Reconstitute in 0.25 ml disilled water							
Max Ex/Em	Fluorophore	Excitation Max	(nm) Emi	ssion Max (nm)				
	RPE 488nm laser	496		578				
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant							
Buffer Solution	Phosphate buffered saline							
Preservative	0.09% Sodium Azide							
Stabilisers	1% Bovine Serum	Albumin						
	5% Sucrose							
Immunogen	Normal murine bone marrow cells.							
External Database Links	UniProt: <u>P35461</u> <u>Relate</u>	ed reagents						

Entrez Gene:

546644 Ly6g Related reagents

Specificity	<b>Rat anti Mouse Gr-1 antibody, clone RB6-8C5</b> 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 <i>et al.</i> 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 <i>et al.</i> 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 <i>et al.</i> 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.
References	<ol> <li>Fleming, T.J. <i>et al.</i> (1993) Selective expression of Ly-6G on myeloid lineage cells in mouse bone marrow. RB6-8C5 mAb to granulocyte-differentiation antigen (Gr-1) detects members of the Ly-6 family. JImmunol. 151 (5): 2399-408.</li> <li>Hestdal, K. <i>et al.</i> (1991) Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. JImmunol. 147 (1): 22-8.</li> <li>Czuprynski, C.J. <i>et al.</i> (1994) Administration of anti-granulocyte mAb RB6-8C5 impairs the resistance of mice to <i>Listeria monocytogenes</i> infection. JImmunol. 152 (4): 1836-46.</li> <li>Sumagin R <i>et al.</i> (2010) LFA-1 and Mac-1 define characteristically different intralumenal crawling and emigration patterns for monocytes and neutrophils <i>in situ.</i> JImmunol. 185 (11): 7057-66.</li> <li>Takano, K. <i>et al.</i> (2011) Successful treatment of acute lung injury with pitavastatin in septic mice: potential role of glucocorticoid receptor expression in alveolar macrophages. J Pharmacol Exp Ther. 336: 381-90.</li> <li>Giroux, M. <i>et al.</i> (2011) SMAD3 prevents graft-versus-host disease by restraining Th1 differentiation and granulocyte-mediated tissue damage. Blood.117: 1734-44.</li> <li>Suttmann, H. <i>et al.</i> (2007) Hemophagocytic macrophages harbor <i>Salmonella enterica</i> during persistent infection. PLoS Pathog. 3: e193.</li> <li>Kanda, N. <i>et al.</i> (2011) Visfatin Enhances CXCL8, CXCL10, and CCL20 Production in Human Keratinocytes. Endocrinology. 152: 3155-64.</li> <li>Conlan, J. and North, R. (1994) Neutrophils are essential for early anti-<i>Listeria</i> defense in the liver, but not in the spleen or peritoneal cavity, as revealed by a granulocyte-depleting monoclonal antibody. J Exp Med. 179:259-68.</li> <li>Takebe, M. <i>et al.</i> (2011) Generation of mature murine monocytes from heterogeneous bone marrow and description of their properties. J Histochem Cytochem. 59: 813-25.</li> <li>Sharp, P.E. <i>et al.</i> (2014) Linibition of histone deacetylases protects septic mice from lung and splenic apo</li></ol>

	15. Roche, J.A. <i>et al.</i> (2015) Myofiber damage precedes macrophage infiltration after <i>in vivo</i> injury in dysferlin-deficient a/j mouse skeletal muscle. <u>Am J Pathol. 185 (6): 1686-98.</u>						
	16. Lee, Y.S. <i>et al.</i> (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. <i>et al.</i> (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>						
	18. Zhang, M.Z. et al. (2015) Inhibition of cyclooxygenase-2 in hematopoietic cells results in						
	salt-sensitive hypertension. J Clin Invest. 125 (11): 4281-94.						
	19. Leblond, A.L. <i>et al.</i> (2015) Systemic and Cardiac Depletion of M2 Macrophage through CSF-1R						
	Signaling Inhibition Alters Cardiac Function Post Myocardial Infarction. PLoS One. 10 (9):						
	<u>e0137515.</u>						
	20. Kojo, K. <i>et al.</i> (2016) BLT1 signalling protects the liver against acetaminophen hepatotoxicity by						
	preventing excessive accumulation of hepatic neutrophils. <u>Sci Rep. 6: 29650.</u>						
	21. Otsuru, S. <i>et al.</i> (2017) Hematopoietic derived cells do not contribute to osteogenesis as osteoblasts. <u>Bone. 94: 1-9.</u>						
	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. <i>et al.</i> (2016) Evidence for a dynamic role for mononuclear phagocytes during endometrial repair and remodelling. <u>Sci Rep. 6: 36748.</u>						
	24. Cotrina ML <i>et al.</i> (2017) Direct comparison of microglial dynamics and inflammatory profile in						
	photothrombotic and arterial occlusion evoked stroke. <u>Neuroscience. 343: 483-494.</u>						
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	Material Safety Datasheet documentation #10075 available at:						
Information	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	Worldwide	Tel: +44 (0)1865 852 700	Europe
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739	
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com	

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_de@bio-rad.com

'M301081:170106'

#### Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | Legal | Imprint