Datasheet: MCA2387T BATCH NUMBER 150240

Description:	RAT ANTI MOUSE Gr-1
Specificity:	Gr-1
Other names:	Ly-6G
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RB6-8C5
Isotype:	lgG2b
Quantity:	25 µg

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 <u>www.bio-rad-antibodies.com/protocols</u>.

		0010.			
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry	-			1/100 - 1/200
	Immunohistology - Frozen	-			
	Immunohistology - Paraffin			•	
	ELISA			•	
	Immunoprecipitation	-			
	Western Blotting	-			
	Immunofluorescence	-			
	Where this antibody has	not been	tested fo	r use in a particular teo	chnique this does not
	necessarily exclude its us	se in sucl	h procedu	ires. Suggested workin	a dilutions are given as
	a guide only. It is recomn		•		•
	•			•	
	system using appropriate	e negative	positive	controis.	
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 salin	е			

Preservative 0.09% Sodium Azide

Stabilisers

Yes
IgG concentration 1.0 mg/ml
Normal murine bone marrow cells.
UniProt:
P35461 Related reagents
Entrez Gene:
546644 Ly6g Related reagents
AB_2115659
 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 <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. Rat anti Mouse Gr-1 antibody, clone RB6-8C5 has been used successfully for the depletion of mature neutrophils <i>in vivo</i> (Czuprynski <i>et al.</i> 1994, Daley <i>et al.</i> 2008).
Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
 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. J Immunol. 151 (5): 2399-408. Hestdal, K. <i>et al.</i> (1991) Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. J Immunol. 147 (1): 22-8. 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. J Immunol. 152 (4): 1836-46. 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> J Immunol. 185 (11): 7057-66. 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.

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Roche, J.A. *et al.* (2015) Myofiber damage precedes macrophage infiltration after *in vivo* injury in dysferlin-deficient a/j mouse skeletal muscle. <u>Am J Pathol. 185 (6): 1686-98.</u>
 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. <u>Infect Immun. 83 (8): 3257-67.</u>

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Regulatory	For research purposes only
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2387T 10040
Guarantee	12 months from date of despatch
	Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
	This product should be stored undiluted.
Storage	Store at +4°C or at -20°C if preferred.
	 23. Kamata, M. et al. (2019) Note of the high-animy fectivities b4 receptor signaling in fibrosis after unilateral ureteral obstruction in mice. <u>PLoS One. 14 (2): e0202842.</u> 26. Natanov, R. <i>et al.</i> (2018) Blood cytokine expression correlates with early multi-organ damage in a mouse model of moderate hypothermia with circulatory arrest using cardiopulmonary bypass. <u>PLoS One. 13 (10): e0205437.</u> 27. Idowu, T.O. <i>et al.</i> (2020) Identification of specific Tie2 cleavage sites and therapeutic modulation in experimental sepsis. <u>Elife. 9: e59520.</u>
	25. Kamata, M. <i>et al.</i> (2019) Role of the high-affinity leukotriene B ₄ receptor signaling in

Related Products

Recommended Secondary Antibodies

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366766:200529'

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