

Datasheet: MCA2387P750

Description:	RAT ANTI MOUSE Gr-1:RPE-Alexa Fluor® 750
Specificity:	Gr-1
Other names:	Ly-6G
Format:	RPE-ALEXA FLUOR® 750
Product Type:	Monoclonal Antibody
Clone:	RB6-8C5
Isotype:	IgG2b
Quantity:	100 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse									
Product Form	Purified IgG conjugated to RPE-Alexa Fluor 750 - lyophilized									
Reconstitution	Reconstitute with 1.0 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.									
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE-Alexa Fluor®750 488nm laser</td> <td>496</td> <td>779</td> </tr> <tr> <td>RPE-Alexa Fluor®750 561nm laser</td> <td>546</td> <td>779</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE-Alexa Fluor®750 488nm laser	496	779	RPE-Alexa Fluor®750 561nm laser	546	779
Fluorophore	Excitation Max (nm)	Emission Max (nm)								
RPE-Alexa Fluor®750 488nm laser	496	779								
RPE-Alexa Fluor®750 561nm laser	546	779								
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant									
Buffer Solution	Phosphate buffered saline									

Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin 5% Sucrose
Immunogen	Normal murine bone marrow cells.
External Database Links	<p>UniProt: P35461 Related reagents</p> <p>Entrez Gene: 546644 Ly6g Related reagents</p>
Specificity	<p>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)</p> <p>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.</p> <p>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).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 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 intraluminal 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. 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. Suttman, H. <i>et al.</i> (2006) Neutrophil granulocytes are required for effective Bacillus

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cardiopulmonary bypass. [PLoS One. 13 \(10\): e0205437.](#)

Storage Prior to reconstitution store at +4°C.
After reconstitution store at +4°C.
DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light

Guarantee 12 months from date of despatch

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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 Negative Controls

[RAT IgG2b NEGATIVE CONTROL:RPE-Alexa Fluor® 750 \(MCA6006P750\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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