

Datasheet: MCA2387A700

**BATCH NUMBER 161125**

<b>Description:</b>	RAT ANTI MOUSE Gr-1:Alexa Fluor® 700
<b>Specificity:</b>	Gr-1
<b>Other names:</b>	Ly-6G
<b>Format:</b>	ALEXA FLUOR® 700
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RB6-8C5
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	100 TESTS/1ml

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

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.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor®700 - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®700</td> <td>702</td> <td>723</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®700	702	723
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®700	702	723					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein</b>	IgG concentration 0.05 mg/ml						

## Concentrations

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**Immunogen** Normal murine bone marrow cells.

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## External Database Links

### UniProt:

[P35461](#)    [Related reagents](#)

### Entrez Gene:

[546644](#)    Ly6g    [Related reagents](#)

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## 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).

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## Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul

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## References

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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. [J Pharmacol Exp Ther. 336: 381-90.](#)
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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. [Eur J Immunol. 32 \(11\): 3235-45.](#)
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26. Natanov, R. *et al.* (2018) Blood cytokine expression correlates with early multi-organ damage in a mouse model of moderate hypothermia with circulatory arrest using cardiopulmonary bypass. [PLoS One. 13 \(10\): e0205437.](#)
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modulation in experimental sepsis. [Elife. 9: e59520.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2387A700>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA6006A700\)](#)

### Recommended Useful Reagents

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

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

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