

Datasheet: MCA2387A488

### **BATCH NUMBER 166291**

Description:	RAT ANTI MOUSE Gr-1:Alexa Fluor® 488		
Specificity:	Gr-1		
Other names:	Ly-6G		
Format:	ALEXA FLUOR® 488		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	RB6-8C5		
Isotype:	lgG2b		
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

Target Species	Mouse Purified IgG conjugated to Alexa Fluor® 488 - liquid				
Product Form					
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	Alexa Fluor®488	495	519		
Preparation	Purified IgG prepare supernatant	ed by affinity chromatog	raphy on Protein G		
uffer Solution	Phosphate buffered	l saline			
reservative	0.09% sodium azid	e (NaN <sub>3</sub> )			
Stabilisers	1% bovine serum a	lbumin			
Approx. Protein	IgG concentration 0	0.05 mg/ml			

#### Concentrations

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Normal murine bone marrow cells.

### External Database Links

#### **UniProt:**

P35461 Related reagents

#### **Entrez Gene:**

546644 Ly6g Related reagents

#### **RRID**

AB\_567107

#### **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 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl

#### References

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- 6. 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. 66: 8250-7.</u>

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- 18. Zhang, M.Z. *et al.* (2015) Inhibition of cyclooxygenase-2 in hematopoietic cells results in salt-sensitive hypertension. <u>J Clin Invest.</u> 125 (11): 4281-94.
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#### **Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

#### Guarantee

12 months from date of despatch

### Acknowledgements

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**Health And Safety** Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA2387A488

10041

Regulatory For research purposes only

# Related Products

# **Recommended Useful Reagents**

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