

RAT anti-MOUSE Ly-6C/G (Gr-1)

Publication Number: L11255

MAN0005000

Rev. 3.00

Store at 2° to 8°C

Catalog No.	Form	Amount	Excitation	Peak Emission	Matching Isotype Control
RM3000	Purified	200 µg	—	—	Rat IgG2b Purified (Cat. no. R2b00)
RM3028	Pacific Blue™	1.0 mL	405 nm	455 nm	—
RM3001	FITC	1.0 mL	488 nm	519 nm	Rat IgG2b FITC (Cat. no. R2b01)
RM3020	Alexa Fluor® 488	1.0 mL	495 nm	519 nm	—
RM3030	Pacific Orange™	1.0 mL	405 nm	551 nm	Rat IgG2b Pacific Orange™ (Cat. no. R2b30)
RM3004	R-PE	0.5 mL	496 nm	578 nm	Rat IgG2b R-PE (Cat. no. R2b04)
RM3005	APC	0.5 mL	650 nm	660 nm	Rat IgG2b APC (Cat. no. R2b05)
RM3021	Alexa Fluor® 647	1.0 mL	650 nm	668 nm	—
RM3006	TC†	0.5 mL	488 nm	670 nm	—
A14801	PerCP-Cy®5.5	0.125 mL (25 µg)	482 nm	695 nm	—
RM3029	Alexa Fluor® 700	1.0 mL	702 nm	723 nm	Rat IgG2b Alexa Fluor® 700 (Cat. no. R2b29)
A14748	PE-Cy®7	0.25 mL (25 µg)	488 nm	767 nm	—

† TC, TRI-COLOR®, PE-Cy®5

Product Description

The Rat anti-Mouse Ly-6C/G (Gr-1) Monoclonal Antibody (mAb) reacts with Ly-6C and Ly-6G (Gr-1) which is a myeloid differentiation antigen that is expressed on cells of the myeloid lineage. The expression of the Ly-6C/G (Gr-1) antigen on granulocytes increases upon granulocyte maturation and differentiation, whereas expression on monocytes is transient¹. It is also present on neutrophils, but it is absent on erythroid cells¹. Expression of the Ly-6C/G can be induced on granulocytes, macrophages, and monocytes using IL-3 or granulocyte-macrophage CSF¹.

Product Specifications

Clonality:	Monoclonal
Host/Class:	Rat IgG
Reactivity:	Mouse Ly-6C/G (Gr-1)
Immunogen:	Normal murine bone marrow cells
Apparent MW:	21–25 kDa
Gene ID:	546644
Sequence Identity:	Mouse
Clone/PAD:	RB6-8C5
Isotype:	IgG _{2b}
Lot:	See product label

Product Applications

Applications reported for the Rat anti-Mouse Ly-6C/G (Gr-1) mAb include flow cytometry, immunoprecipitation, western blot, and immunostaining^{2,3}.

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Storage and Handling

Store reagents at 2° to 8°C. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Cells should be analyzed within 18 hours of staining for best results.

Avoid light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage Buffer

Phosphate Buffered Saline (PBS) with 0.1% sodium azide. Conjugated products are also formulated with BSA and may contain sucrose as an additional stabilizing agent. PE-Cy®7 conjugate contains PBS with 0.1% sodium azide, and a non-BSA stabilizing agent. PerCP-Cy®5.5 conjugates contain an aqueous buffer with 0.09% sodium azide, and may contain carrier protein/stabilizer.

Caution: Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.

For research use only. Not for human or animal therapeutic or diagnostic use.

References

- Hestdal, K., F. W. Ruscetti, J. N. Ihle, S. E. W. Jacobsen, C. M. Dubois, W. C. Kopp, D. L. Longo, and J. R. Keller. 1991. Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. *J. Immunol.* 147: 22–28.
- Fleming, T. J., M. L. Fleming, and T. R. Malek. 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: 2399–2408.
- Jutila, M. A., F. G. M. Kroese, K. L. Jutila, A. M. Stall, S. Fiering, L. A. Herzenberg, E. L. Berg, and E. C. Butcher. 1988. Ly-6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon-gamma. *Eur. J. Immunol.* 18: 1819–1826.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Related Products

Product Name	Quantity	Catalog no.
AbC™ Anti-Mouse Bead Kit	1 kit	A10344
AbC™ anti-Rat/Hamster Bead Kit	1 kit	A10389
Protein A Agarose	5 mL	15918-014
Recombinant Protein G (rProtein G) Agarose	5 mL	15920-010

Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

Limited Product Warranty

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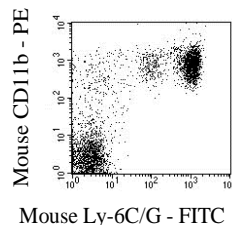


Figure 1 Two-color analysis of Ly-6C/G expression on mouse lysed whole blood.

A single cell suspension of C57BL/6 lysed whole blood was concurrently stained with 0.1 µg of anti-mouse CD11b-PE (Cat. no. RM2804) and 0.1 µg of Rat anti-Mouse Ly-6C/G-FITC Monoclonal Antibody (Cat. no. RM3001). Gating was based on light scatter and the exclusion of propidium iodide (Cat. no. DCD00-3).

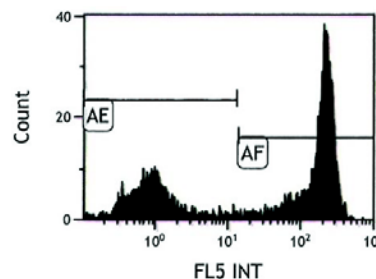


Figure 2 Ly-6C/G expression on mouse bone marrow cells.

BALB/c bone marrow cells were stained with Rat anti-Mouse Ly-6C/G-GR-1-PE/CY[®]7 Monoclonal Antibody (Cat. no. A14748).

Note: All flow cytometric data shown may not necessarily have been generated using the enclosed lot of reagent. For this reason, and due to differences in flow cytometers and cytometer settings, results may vary from those illustrated above. It is suggested that investigators titrate reagents to determine optimal conditions for use in their systems.

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15 July 2012

