

## Technical Data Sheet

## Purified NA/LE Rat Anti-Mouse Ly-6G and Ly-6C

## Product Information

<b>Material Number:</b>	553122
<b>Alternate Name:</b>	Ly6c, Lymphocyte antigen 6C2; Lymphocyte antigen 6G, Ly6g, Gr-1
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Clone:</b>	RB6-8C5
<b>Isotype:</b>	Rat IgG2b, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	No azide/low endotoxin: Aqueous buffered solution containing protein stabilizer, no preservative, 0.2 $\mu$ m sterile filtered. Endotoxin level is $\leq$ 0.01 EU/ $\mu$ g ( $\leq$ 0.001 ng/ $\mu$ g) of protein as determined by the LAL assay.

## Description

The RB6-8C5 monoclonal antibody recognizes a common epitope on Ly-6G and Ly-6C, previously known as the myeloid differentiation antigen Gr-1. In the bone marrow, the level of antigen expression is directly correlated with granulocyte differentiation and maturation. The antigen is also expressed on the monocyte lineage in the bone marrow, but not on erythroid cells. In the periphery, RB6-8C5 antibody recognizes granulocytes (neutrophils and eosinophils) and monocytes. The RB6-8C5 antibody is a component of the "lineage cocktail" used in studies of hematopoietic cell lineages. The 1A8 antibody (Cat. No. 551461) specifically recognizes Ly-6G, but not Ly-6C.

Based on comparison of the staining patterns given by 1A8 versus RB6-8C5 antibodies on total blood leucocytes, it is evident that the 1A8 antibody stains the RB6-8C5-bright population, corresponding to Ly-6G-expressing granulocytes; whereas, the RB6-8C5-dim population is 1A8-negative and corresponds to Ly-6C-expressing lymphocytes and monocytes. Please refer to the Technical Data Sheets for Cat. No. 551459 and 553128 for more detailed information.

## Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

## Application Notes

## Application

Flow cytometry	Routinely Tested
Cytotoxicity	Reported
Depletion	Reported
Immunoprecipitation	Reported
Immunohistochemistry-zinc-fixed	Reported
Immunohistochemistry-paraffin	Reported
Immunohistochemistry-frozen	Reported
Western blot	Reported
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

## Suggested Companion Products

Catalog Number	Name	Size	Clone
553985	Purified NA/LE Rat IgG2b, $\kappa$ Isotype Control	0.5 mg	A95-1
553123	Purified Rat Anti-Mouse Ly-6G and Ly-6C	0.5 mg	RB6-8C5
551461	PE Rat Anti-Mouse Ly-6G	0.2 mg	1A8
551459	Purified Rat Anti-Mouse Ly-6G	0.5 mg	1A8
550291	Purified Rat Anti-Mouse Ly-6G and Ly-6C	1 mL	RB6-8C5
553128	PE Rat Anti-Mouse Ly-6G and Ly-6C	0.1 mg	RB6-8C5
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

## BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 866.979.9408 Europe 32.2.400.98.95 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

© 2017 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.

553122 Rev. 16



## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

- Brummer E, Sugar AM, Stevens DA. Immunological activation of polymorphonuclear neutrophils for fungal killing: studies with murine cells and blastomyces dermatitidis in vitro. *J Leukoc Biol.* 1984; 36(4):505-520. (Clone-specific: Cytotoxicity)
- Conlan JW, North RJ. Neutrophils are essential for early anti-Listeria defense in the liver, but not in the spleen or peritoneal cavity, as revealed by a granulocyte-depleting monoclonal antibody. *J Exp Med.* 1994; 179(1):259-268. (Clone-specific: Depletion)
- Czuprynski CJ, Brown JF, Maroushek N, Wagner RD, Steinberg H. Administration of anti-granulocyte mAb RB6-8C5 impairs the resistance of mice to Listeria monocytogenes infection. *J Immunol.* 1994; 152(4):1836-1846. (Clone-specific: Depletion)
- Fleming TJ, Fleming ML, Malek TR. 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.* 1993; 151(5):2399-2408. (Clone-specific: Immunoprecipitation, Inhibition)
- Hestdal K, Ruscetti FW, Ihle JN, et al. Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. *J Immunol.* 1991; 147(1):22-28. (Biology)
- Jutila MA, Kroese FG, Jutila KL, et al. Ly-6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon-gamma. *Eur J Immunol.* 1988; 18(11):1819-1826. (Biology: Western blot)
- Lagasse E, Weissman IL. Flow cytometric identification of murine neutrophils and monocytes. *J Immunol Methods.* 1996; 197(1-2):139-150. (Biology)
- Nagendra S, Schlueter AJ. Absence of cross-reactivity between murine Ly-6C and Ly-6G. *Cytometry A.* 2004; 58(2):195-200. (Clone-specific)
- Osawa M, Tokumoto Y, Nakauchi H. Hematopoietic stem cells. In: Herzenberg LA, Weir DM, Blackwell C, ed. *Weir's Handbook of Experimental Immunology, 5th Edition.* Cambridge: Blackwell Science; 1996:66.1-66.5. (Biology)
- Rakhmilevich AL. Neutrophils are essential for resolution of primary and secondary infection with Listeria monocytogenes. *J Leukoc Biol.* 1995; 57(6):827-831. (Clone-specific: Depletion)
- Stoppacciaro A, Melani C, Parenza M, et al. Regression of an established tumor genetically modified to release granulocyte colony-stimulating factor requires granulocyte-T cell cooperation and T cell-produced interferon gamma. *J Exp Med.* 1993; 178(1):151-161. (Clone-specific: Depletion, Immunohistochemistry)
- Tepper RI, Coffman RL, Leder P. An eosinophil-dependent mechanism for the antitumor effect of interleukin-4. *Science.* 1992; 257(5069):548-551. (Clone-specific: Depletion)
- Tumpey TM, Chen SH, Oakes JE, Lausch RN. Neutrophil-mediated suppression of virus replication after herpes simplex virus type 1 infection of the murine cornea. *J Virol.* 1996; 70(2):898-904. (Clone-specific: Depletion, Immunohistochemistry)