

TECHNICAL DATA SHEET

CyFlow™ Ly6G FITC Anti-Ms; Clone RB6-8C5

REF BQ742945

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	Ly6G
Alternative Names	—
Clone	RB6-8C5
Clonality	monoclonal
Format	FITC
Host / Isotype	Rat / IgG2b
Species Reactivity	Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.5 mg/ml]
Immunogen	Murine granulocytes

Specificity

The rat monoclonal antibody RB6-8C5 recognizes Ly6G component of Gr-1 antigen, a commonly used surface marker of neutrophils.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 1 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

Ly6G is a component of the myeloid differentiation antigen Gr-1, together with Ly6C. Ly6G is a good marker for detection of peripheral neutrophils. Expression of Gr-1 in bone marrow correlates with granulocyte differentiation and maturation. Physiological role of Ly6G remains still unclear. Its treatment with antibodies in vivo leads to neutropenia and has inhibitory effect on local immune responses.

References

- Hestdal K, Ruscetti FW, Ihle JN, Jacobsen SE, Dubois CM, Kopp WC, Longo DL, Keller JR: Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. J Immunol. 1991 Jul 1; 147(1):22-8. < PMID: 1711076 >
- Stoppacciaro A, Melani C, Parenza M, Mastracchio A, Bassi C, Baroni C, Parmiani G, Colombo MP: 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 Jul 1; 178(1):151-61. < PMID: 7686211 >
- 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-{01} detects members of the Ly-6 family. J Immunol. 1993 Sep 1; 151(5):2399-408. < PMID: 8360469 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Brown CR, Blaho VA, Loiacono CM: Susceptibility to experimental Lyme arthritis correlates with KC and monocyte chemoattractant protein-1 production in joints and requires neutrophil recruitment via CXCR2. *J Immunol.* 2003 Jul 15; 171(2):893-901. < PMID: 12847259 >
- Nagendra S, Schlueter AJ: Absence of cross-reactivity between murine Ly-6C and Ly-6G. *Cytometry A.* 2004 Apr; 58(2):195-200. < PMID: 15057973 >
- Koo GC, Gan YH: The innate interferon gamma response of BALB/c and C57BL/6 mice to in vitro *Burkholderia pseudomallei* infection. *BMC Immunol.* 2006 Aug 18; 7:19. < PMID: 16919160 >
- Fan J, Li Y, Levy RM, Fan JJ, Hackam DJ, Vodovotz Y, Yang H, Tracey KJ, Billiar TR, Wilson MA: Hemorrhagic shock induces NAD(P)H oxidase activation in neutrophils: role of HMGB1-TLR4 signaling. *J Immunol.* 2007 May 15; 178(10):6573-80. < PMID: 17475888 >
- dos Santos MS, Vaz Cardoso LP, Nascimento GR, Lino Rde S Jr, Dorta ML, de Oliveira MA, Ribeiro-Dias F: *Leishmania major*: recruitment of Gr-1+ cells into draining lymph nodes during infection is important for early IL-12 and IFN gamma production. *Exp Parasitol.* 2008 Jul; 119(3):403-10. < PMID: 18501355 >
- Leendertse M, Willems RJ, Giebelen IA, Roelofs JJ, Bonten MJ, van der Poll T: Neutrophils are essential for rapid clearance of *Enterococcus faecium* in mice. *Infect Immun.* 2009 Jan; 77(1):485-91. < PMID: 19001080 >
- Jung YW, Zindl CL, Lai JF, Weaver CT, Chaplin DD: MMP induced by Gr-1+ cells are crucial for recruitment of Th cells into the airways. *Eur J Immunol.* 2009 Aug; 39(8):2281-92. < PMID: 19593770 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com