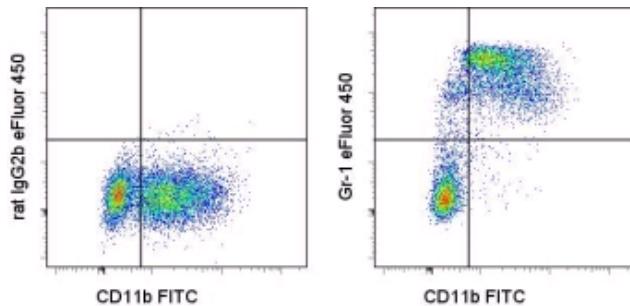


Anti-Mouse Ly-6G (Gr-1) eFluor® 450 (Pacific Blue® replacement)

Catalog Number: 48-5931

Also Known As: Gr1, Ly6G

RUO: For Research Use Only



Staining of C57BL/6 bone marrow cells with Anti-Mouse CD11b FITC (cat. 11-0112) and 0.03 µg of Rat IgG2b κ Isotype Control eFluor® 450 (cat. 48-4031) (left) or 0.03 µg of Anti-Mouse Ly-6G (Gr-1) eFluor® 450 (right). Total cells were used for analysis.

Product Information

Contents: Anti-Mouse Ly-6G (Gr-1) eFluor® 450 (Pacific Blue® replacement)

REF Catalog Number: 48-5931

Clone: RB6-8C5

Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2b, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.

LOT Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

The RB6-8C5 monoclonal antibody reacts with mouse Ly-6G, a 21-25 kDa protein also known as the myeloid differentiation antigen Gr-1. A GPI-linked protein, Gr-1 is expressed by the myeloid lineage in a developmentally regulated manner in the bone marrow. While monocytes only express Gr-1 transiently during their bone marrow development, the expression of Gr-1 on bone marrow granulocytes as well as on peripheral neutrophils is a good marker for these populations.

Blocking studies with Ly-6C (clone HK1.4 cat. 17-5932) or RB6-8C5 show no effect against staining with the other clone thereby suggesting that RB6-8C5 does not recognize Ly-6C in resting bone marrow or splenocytes.

Applications Reported

This RB6-8C5 antibody has been reported for use in flow cytometric analysis.

eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser. Please make sure that your instrument is capable of detecting this fluorochrome.

Applications Tested

This RB6-8C5 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 0.06 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor™ 450 is a replacement for Pacific Blue®. eFluor™ 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

References

Sasmono RT, Ehrnsperger A, Cronau SL, Ravasi T, Kandane R, Hickey MJ, Cook AD, Himes SR, Hamilton JA, Hume DA. Mouse neutrophilic granulocytes express mRNA encoding the macrophage colony-stimulating factor receptor (CSF-1R) as well as many other macrophage-specific transcripts and can transdifferentiate into macrophages in vitro in response to CSF-1. *J Leukoc Biol.* 2007 Jul;82(1):111-23. (RB6-8C5, Cross-reactivity to Ly-6G and Ly-6C, Pubmed)

Huang B, Zhao J, Shen S, Li H, He KL, Shen GX, Mayer L, Unkeless J, Li D, Yuan Y, Zhang GM, Xiong H, Feng ZH. Listeria monocytogenes promotes tumor growth via tumor cell toll-like receptor 2 signaling. *Cancer Res.* 2007 May 1;67(9):4346-52. (RB6-8C5, in vivo depletion, PubMed)

Fan J, Li Y, Vodovotz Y, Billiar TR, Wilson MA. Hemorrhagic shock-activated neutrophils augment TLR4 signaling-induced TLR2 upregulation in alveolar macrophages: role in hemorrhage-primed lung inflammation. Am J Physiol Lung Cell Mol Physiol. 2006 Apr;290(4):L738-L746. (RB6-8C5, in vivo depletion, PubMed)

Alvarez MJ, Prada F, Salvatierra E, Bravo AI, Lutzky VP, Carbone C, Pitossi FJ, Chuluyen HE, Podhajcer OL. Secreted protein acidic and rich in cysteine produced by human melanoma cells modulates polymorphonuclear leukocyte recruitment and antitumor cytotoxic capacity. Cancer Res. 2005 Jun 15;65(12):5123-32. (RB6-8C5, IHC paraffin, Pubmed)

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. (RB6-8C5, IHC paraffin, Pubmed)

Miura M, Fu X, Zhang QW, Remick DG, Fairchild RL. Neutralization of Gro alpha and macrophage inflammatory protein-2 attenuates renal ischemia/reperfusion injury. Am J Pathol. 2001 Dec;159(6):2137-45. (RB6-8C5, IHC frozen, Pubmed)

Dunussi-Joannopoulos K, Runyon K, Erickson J, Schaub RG, Hawley RG, Leonard JP. Vaccines with interleukin-12-transduced acute myeloid leukemia cells elicit very potent therapeutic and long-lasting protective immunity. Blood. 1999 Dec 15;94(12):4263-73. (RB6-8C5, IHC frozen, Pubmed)

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 Sep 1;151(5):2399-408. (RB6-8C5, Cross-reactivity to Ly-6G and Ly-6C, Pubmed)

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.

Related Products

11-0112 Anti-Mouse CD11b FITC (M1/70)

48-4031 Rat IgG2b K Isotype Control eFluor® 450 (Pacific Blue® replacement)

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com