OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for CL046B

Ly6g Rat Monoclonal Antibody [Clone ID: RB6-8C5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	RB6-8C5
Applications:	FC, IHC, WB
Recommended Dilution:	**Flow Cytometry** (Ref.1-3). **Immunohistochemistry on Frozen and Paraffin Embedded Sections**(Ref.6). **Western blot** (Ref.5). **Complement-mediated depletion.**
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Mouse Granulocytes.
Specificity:	Anti-Mouse Gr-1 monoclonal antibody reacts with the myeloid differentiation antigen Gr-1. (Ref.1,2). This 25-30 kDa cell surface antigen is expressed on myeloid cells but not lymphoid or erythroid cells. The expression of the Gr-1 antigen increases with granulocyte maturation (Ref.3) as shown by the distinct populations of bone-marrow cells this monoclonal antibody labels: negative, low positive and high positive. Expression is transient on cells of monocytic lineage (Ref.3).
Formulation:	PBS containing 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml Label: Biotin State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Biotin
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.

View online »

Gene Name: lymphocyte antigen 6 complex, locus G

Database Link: Entrez Gene 546644 Mouse
P35461

Synonyms: Gr-1 Granulocyte marker

Note: Protocol: **FLOW CYTOMETRY ANALYSIS:**

Method:
1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of $2x10^7$ cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10^6 cells, representing 1 test).
4. To each tube, add 0.1-0.2 µg* of CL046B per 10^6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 µl of secondary antibody FITC Streptavidin at 1/500 dilution.
9. Incubate tubes at 4°C for 30-60 minutes (It is recommended that tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C.
11. Resuspend the cell pellet in 50 µl ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

Media:
A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Results:

Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: BALB/c
Cell Concentration: $1x10^6$ cells per test
Antibody Concentration Used: 0.1 µg/10^6 cells
Isotypic Control: Rat IgG2b

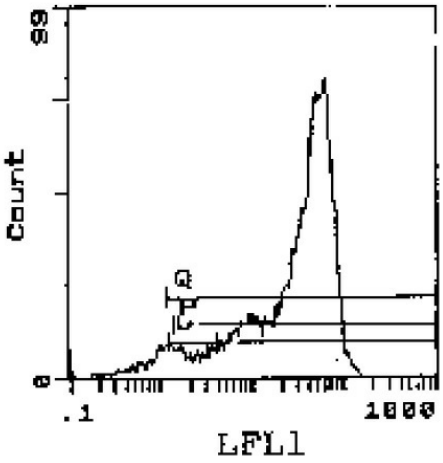
Cell: Source Percentage of cells stained above control:
Thymus: 1.5%
Whole Blood: Granulocytes: 90.8%, Monocytes: 91.8%

Bone Marrow: Granulocytes: 94.2%, Monocytes: 95.3%

Cell Source: Bone Marrow Monocytes
Percentage of cells stained above control:95.3%

Strain Distribution by Flow Cytometry Analysis:
Cell Concentration: $1x10^6$ cells per test.
Antibody Concentration Used: 0.1 µg/10^6 cells.
Strains Tested: BALB/c, C57BL/6, CBA, C3H/He.
Positive: BALB/c, C57BL/6, CBA, C3H/He.
Negative: none.

Product images:



Cell Source: Bone Marrow Monocytes.
Percentage of cells stained above control: 95.3%