

# Ly-6G/Ly-6C Monoclonal Antibody (RB6-8C5), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RB6-8C5
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2662805

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	7 Publications
Flow Cytometry (Flow)	0.125 µg/test	23 Publications

## Product Specific Information

**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. eBioscience testing indicates that in the bone marrow and lysed whole blood, the antibody clone RB6-8C5 also stains cells that express the highest levels of Ly6c (as defined by staining with antibody clone HK1.4). It is recommended that 1A8-Ly6G (Product # 9668) be used when looking at Ly-6G specific targets.

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

**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<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

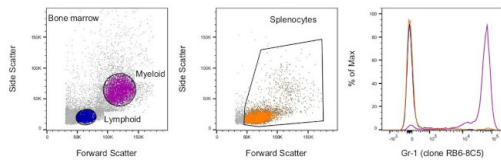
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

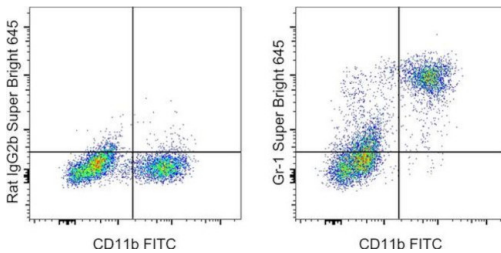
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For Ly-6G/Ly-6C Monoclonal Antibody (RB6-8C5), Super Bright™ 645, eBioscience™



### Ly-6G/Ly-6C Antibody (64-5931-82)

Staining of mouse splenocytes and bone marrow cells. As expected based on known relative expression patterns, Gr-1 clone RB6-8C5 stains cells in the bone marrow myeloid gate and not in the splenocytes gate or bone marrow lymphoid gate. Details: Balb/c bone marrow cells (left) and splenocytes (middle) were surface stained with Gr-1 (clone RB6-8C5) followed by staining with 7-AAD. Viable bone marrow cells in the lymphoid (blue histogram) and myeloid (purple histogram) gates and viable splenocytes (orange histogram) were used for analysis. {RE}



### Ly-6G/Ly-6C Antibody (64-5931-82) in Flow

Staining of C57BL/6 marrow cells with Anti-Mouse CD11b FITC (Product # 11-0112-41) and Rat IgG2a K Isotype Control (Product # 64-4321-82) (left) or 0.06  $\mu$ g of Anti-Mouse Ly-6G (Gr-1) Super Bright 645 (right). Total cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## Immunohistochemistry (7)

Science advances

### Nonredundancy of IL-1 and IL-1 is defined by distinct regulation of tissues orchestrating resistance versus tolerance to infection.

"Published figure using Ly-6G/Ly-6C monoclonal antibody (Product # 64-5931-82) in Immunohistochemistry"  
 Authors: Eismayr K,Bestehorn A,Morelli L,Borroni M,Vande Walle L,Lamkanfi M,Kovarik P

Year  
2022

iScience

### SPARC regulation of PMN clearance protects from pristane-induced lupus and rheumatoid arthritis.

"Published figure using Ly-6G/Ly-6C monoclonal antibody (Product # 64-5931-82) in Immunohistochemistry"  
 Authors: Sangaletti S,Botti L,Gulino A,Lecis D,Bassani B,Portararo P,Milani M,Cancila V,De Cecco L,Dugo M,Tripodo C, Colombo MP

Year  
2021

[View more IHC references on thermofisher.com](#)

## Flow Cytometry (23)

Journal of clinical & cellular immunology

### Long Non-Coding RNA Hotairm1 Promotes S100A9 Support of MDSC Expansion during Sepsis.

"Published figure using Ly-6G/Ly-6C monoclonal antibody (Product # 64-5931-82) in Flow Cytometry"  
 Authors: Alkhateeb T,Bah I,Kumbhare A,Youssef D,Yao ZQ,McCall CE,Gazzar ME

Year  
2022

Frontiers in immunology

### IFN-Producing / T Cells Accumulate in the Fetal Brain Following Intrauterine Inflammation.

"Published figure using Ly-6G/Ly-6C monoclonal antibody (Product # 64-5931-82) in Flow Cytometry"  
 Authors: Lewis EL,Tulina N,Anton L,Brown AG,Porrett PM,Elovitz MA

Year  
2022

[View more Flow references on thermofisher.com](#)

## More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.