

Alexa Fluor[®] 700 anti-mouse Ly-6G/Ly-6C (Gr-1) Antibody

Catalog# / Size	108421 / 25 µg 108422 / 100 µg
Clone	RB6-8C5
Regulatory Status	RUO
Other Names	Gr-1
Isotype	Rat IgG2b, κ
Description	Gr-1 is a 21-25 kD protein also known as Ly-6G/Ly-6C. This myeloid differentiation antigen is a glycosylphosphatidylinositol (GPI)-linked protein expressed on granulocytes and macrophages. In bone marrow, the expression levels of Gr-1 directly correlate with granulocyte differentiation and maturation; Gr-1 is also transiently expressed on bone marrow cells in the monocyte lineage. Immature Myeloid Gr-1+ cells play a role in the development of antitumor immunity.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Raised against granulocytes of mouse origin
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 700 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤ 0.25 µg per 10⁶ cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 700 has a maximum emission of 719 nm when it is excited at 633nm / 635nm. Prior to using Alexa Fluor[®] 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application Notes	<p>Clone RB6-8C5 binds with high affinity to mouse Ly-6G molecules and to a lower extent to Ly-6C¹⁹. Clone RB6-8C5 impairs the binding of anti-mouse Ly-6G clone 1A8¹⁹. However, clone RB6-8C5 is able to stain in the presence of anti-mouse Ly-6C clone HK1.4²⁰.</p> <p>The RB6-8C5 antibody has been used to identify peripheral blood neutrophils and deplete granulocytes <i>in vivo</i>. Additional reported applications (for relevant formats of this clone) include: <i>in vitro</i> complement-mediated cytotoxicity², <i>in vivo</i> depletion^{3-5,9}, immunoprecipitation¹, immunohistochemical staining⁶ (including paraffin-embedded sections^{9,16,33-35}, acetone-fixed frozen sections¹¹ and zinc-fixed sections¹⁵), and Western blotting⁷. RB6-8C5 is not suitable for depletion of hepatic myeloid derived suppressor cells (MDSCs)²⁰.</p> <p>Special Note: For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 108436).</p>

Application References

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Product Citations

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RRID

AB_493728 (BioLegend Cat. No. 108421)
AB_2137487 (BioLegend Cat. No. 108422)

Antigen Details

Structure

21-25 kD

Distribution	Granulocytes, monocytes
Cell Type	Granulocytes, Monocytes, Neutrophils
Biology Area	Immunology, Innate Immunity
Antigen References	<ol style="list-style-type: none"> 1. Fleming TJ, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2399. 2. Jutila MA, <i>et al.</i> 1988. <i>Eur. J. Immunol.</i> 18:1819. 3. Goni O, <i>et al.</i> 2002. <i>Int. Immunol.</i> 14:1125.
Gene ID	17067 546644

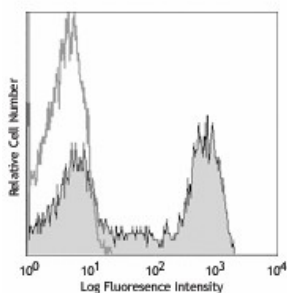
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse Ly-6G/Ly-6C (Gr-1), Biotin anti-mouse Ly-6G/Ly-6C (Gr-1), FITC anti-mouse Ly-6G/Ly-6C (Gr-1), PE anti-mouse Ly-6G/Ly-6C (Gr-1), PE/Cyanine5 anti-mouse Ly-6G/Ly-6C (Gr-1), Purified anti-mouse Ly-6G/Ly-6C (Gr-1), PE/Cyanine7 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 488 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 647 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 700 anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 711™ anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Cyanine7 anti-mouse Ly-6G/Ly-6C (Gr-1), Pacific Blue™ anti-mouse Ly-6G/Ly-6C (Gr-1), PerCP/Cyanine5.5 anti-mouse Ly-6G/Ly-6C (Gr-1), PerCP anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 421™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 570™ anti-mouse Ly-6G/Ly-6C (Gr-1), Ultra-LEAF™ Purified anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 510™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 605™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 650™ anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 594 anti-mouse Ly-6G/Ly-6C (Gr-1), Purified anti-mouse Ly-6G/Ly-6C (Gr-1) (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Fire™ 750 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-A0116 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-C0116 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-B0116 anti-mouse Ly-6G/Ly-6C (Gr-1), Spark Blue™ 550 anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Fire™ 810 anti-mouse Ly-6G/Ly-6C (Gr-1), Spark Violet™ 423 anti-mouse Ly-6G/Ly-6C (Gr-1) Antibody, Spark UV™ 387 anti-mouse Ly-6G/Ly-6C (Gr-1)

Product Data



C57BL/6 mouse bone marrow (gated on myeloid cell population) stained with Ly-6G/Ly-6C (clone RB6-8C5) Alexa Fluor® 700 (filled histogram) or rat IgG2b, κ Alexa Fluor® 700 isotype control (open histogram).

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