

Rat anti-Mouse Gr-1 Monoclonal Antibody | anti-Gr-1 antibody

Rat Anti Mouse Gr-1: FITC

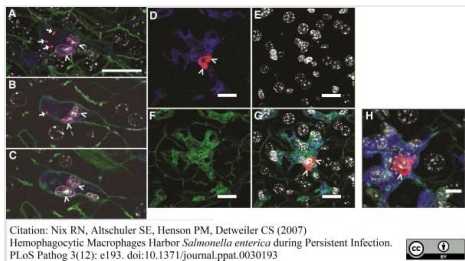
CATALOG # AAA12257	HOST Rat	REACTIVITY Mouse	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

Gr-1; Monoclonal Antibody; Rat Anti Mouse Gr-1: FITC; Gr-1 antibody (RB6-8C5); Rat anti Mouse Gr-1; anti-Gr-1 antibody

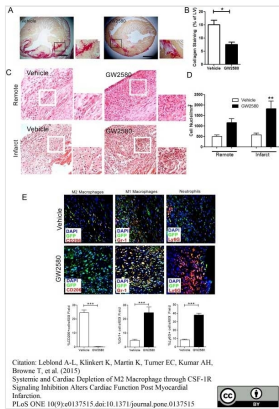
PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	RB6-8C5
Purity/Purification	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Form/Format	Liquid; Phosphate Buffered Saline
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	111
Applicable Applications for anti-Gr-1 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Normal murine bone marrow cells.
Conjugation	FITC
Carrier Free	Yes
Preservative Stabilizers	0.09% Sodium Azide
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.



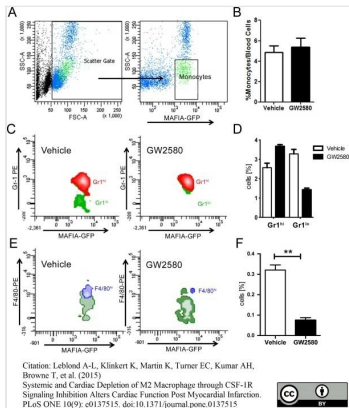
Application Data

Published Customer Image:Rat anti Mouse Gr-1 antibody, clone RB6-8C5 used for the identification of neutrophils by immunofluorescence.Image caption:S. typhimurium-Infected Macrophages Containing Phagocytosed Neutrophils and T Cells Confocal fluorescence microscopy of 50-μm-thick liver sections from 1-wk-infected Slc11a1 wild-type mice. (A-C) S.Typhimurium (O-antigen, arrows) are red, macrophages (F4-80 and MOMA-2) are blue, DNA (DAPI) is gray, phalloidin is green, and neutrophils (Gr-1/Ly-6G/RB6-8C5) are pink (arrowheads). (A) Collapsed image from a 40-μm Z-stack. Scale bar is 20 μm. (B and C) Sections from (A) that are 4 μm apart. The video from which (A-C) were derived (Video S2) is available online. (D-G) T cells within multinucleate macrophages.Macrophages (F4-80 and MOMA-2) are blue (D, G, and H), T cells (CD3zeta) are red (D, G, arrowheads), DAPI is gray (E, G), actin-bound phalloidin is green (F, G). (G) Is a composite of (D, E, and F). Scale bars are 16 μm. (H) An image from a different mouse stained and labeled as described for (D-G). Scale bar is 8 μm. A video showing a T cell inside of a macrophage is available online (Video S3).From: Nix RN, Altschuler SE, Henson PM, Detweiler CS (2007) Hemophagocytic Macrophages Harbor Salmonella enterica during Persistent Infection.PLoS Pathog 3(12): e193. doi:10.1371/journal.ppat.0030193



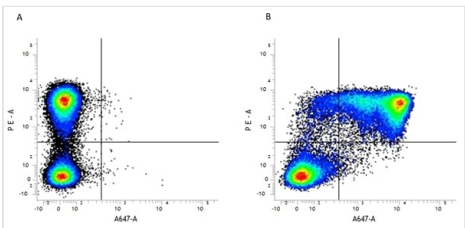
Application Data

Published customer image:Rat anti Mouse Gr-1 antibody, clone RB6-8C5 used for the evaluation of Gr-1 expression on circulating monocytes from mouse blood by flow cytometry.Image caption:Effect of CD206+ M2 macrophage depletion on collagen deposition and cell infiltration within the infarct 2 weeks post MI in MAFIA mice. A. Representative Sirius Red staining on histological sections from MAFIA mice 2 weeks post MI. B. Quantification of collagen staining as a percentage of LV from MAFIA mice 2 weeks post MI (Scale bar: 1 mm, n = 6 animals per group, >=8 images per animal). C. Representative hematoxylin and eosin staining on 20x infarct or remote histological section from MAFIA mice 2 weeks post MI showing an increase in inflammatory infiltrates in animals treated with GW2580. D. Quantification of nuclei number per mm2 in MAFIA remote and infarct zone in MAFIA mice 2 weeks post MI. (n = 4-6 animals per group). E. Representative images of immunofluorescent staining of CD206+ M2 macrophages, Gr1+ M1 macrophages and Ly6G+ neutrophils within the infarct zone from MAFIA mice 2 weeks post MI. Quantification of Ly6G+ neutrophil, Gr1+ M1 macrophage and CD206+ M2 macrophage infiltration within the infarct zone from MAFIA mice 2 weeks post MI (n = 4 animals per group, 10 images/animal). * p



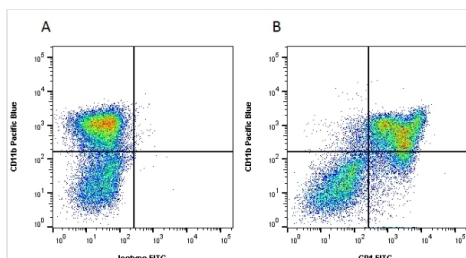
Application Data

Published customer image:Rat anti Mouse Gr-1 antibody, clone RB6-8C5 used for the evaluation of Gr-1 expression on circulating monocytes from mouse blood by flow cytometry.Image caption:Depletion of the circulating monocyte and Gr1lo and F4/80hi populations following 1 week GW2580 treatment. A. Identification of total monocyte population in mouse blood using MAFIA-GFP. B. Following one week of GW2580 treatment, no difference in total circulating monocytes was observed. FACS quantification of Gr1hi (M1) and Gr1lo (M2; C,D) and F4/80hi (E,F) in total monocytes following 1 week GW2580 treatment (n = 6 and n = 4 animals per group, respectively).From: Leblond A-L, Klinkert K, Martin K, Turner EC, Kumar AH, Browne T, et al. (2015) Systemic and Cardiac Depletion of M2 Macrophage through CSF-1R Signaling Inhibition Alters Cardiac Function Post Myocardial Infarction.PLoS ONE 10(9): e0137515. doi:10.1371/journal.pone.0137515



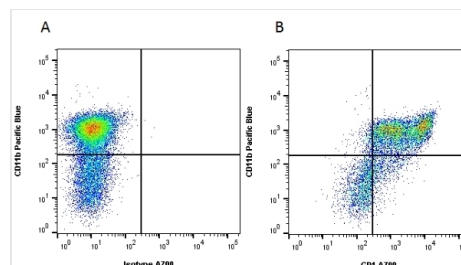
Application Data

Figure A : RPE conjugated Rat anti Mouse CD11b and Alexa Fluor 647 conjugated Rat IgG2b isotype control . Figure B. RPE conjugated Rat anti Mouse CD11b and Alexa Fluor 647 conjugated Rat anti Mouse Gr-1 . All experiments performed on murine bone marrow in the presence of Murine SeroBlock (BUF041A).



Application Data

Figure A : Pacific Blue conjugated Rat anti Mouse CD11b and FITC conjugated Rat IgG2b isotype control . Figure B. Pacific Blue conjugated Rat anti Mouse CD11b and FITC conjugated Rat anti Mouse GR-1 . All experiments performed on red cell lysed mouse bone marrow gated on mononuclear cells in the presence of Mouse Seroblock (BUF041A). Data acquired on the ZE5 cell analyzer.



Application Data

Figure A. Pacific Blue conjugated Rat anti Mouse CD11b and Alexa Fluor700 conjugated Rat IgG2b isotype control . Figure B. Pacific Blue conjugated Rat anti Mouse CD11b and Alexa Fluor700 conjugated Rat anti Mouse GR-1 . All experiments performed on red cell lysed mouse bone marrow gated on mononuclear cells in the presence of Mouse Seroblock (BUF041A). Data acquired on the ZE5 cell analyzer.

ADDITIONAL INFORMATION

Related Product Information for anti-Gr-1 antibody

Rat anti Mouse Gr-1 antibody, clone RB6-8C5 recognizes the mouse Gr-1 antigen, a ~21-25 kDa GPI anchored cell surface protein bearing a single uPAR/Ly6 domain that belongs to the Ly-6 family of proteins (Lee et al. 2013). Rat anti Mouse Gr-1 antibody, clone RB6-8C5 reacts predominantly with the Ly-6G protein but weaker reactivity with the Ly-6C protein has been reported (Fleming et al. 1993). However, other observations dispute the cross-reactivity of clone RB6-8C5 with the Ly-6C protein with the alternative explanation that certain sub-populations of bone marrow cells simultaneously express both Ly-6C and Ly-6G (Nagendra et al. 2007)

The Gr-1 antigen is primarily a marker of myeloid differentiation. In the bone marrow the level of Gr-1 expression is low on immature myeloblasts and increases as the myeloid cells mature to granulocytes. Gr-1 is also expressed on macrophages and transiently on differentiating monocytes.

Rat anti Mouse Gr-1 antibody, clone RB6-8C5 has been used successfully for the depletion of mature neutrophils in vivo (Czuprynski et al 1994, Daley et al. 2008).

NCBI AND UNIPROT INFORMATION

NCBI GI #	547876
UniProt Accession #	P35461
NCBI Official Full Name	Lymphocyte antigen 6G
UniProt Protein Name	Lymphocyte antigen 6G
UniProt Gene Name	Ly6g
UniProt Synonym Gene Names	Ly-6G
UniProt Entry Name	LY6G_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/gr-1-antibody-clone-rb6-8c5-flow-cytometry-elisa/12257>