Product Datasheet

Ly-6G/Ly-6C Antibody (RB6-8C5) - BSA Free
NBP2-00441-100ug

Unit Size: 100 ug

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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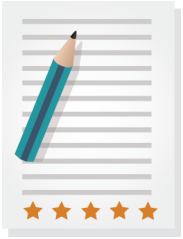
Updated 9/9/2025 v.20.1



NBP2-00441-100ug

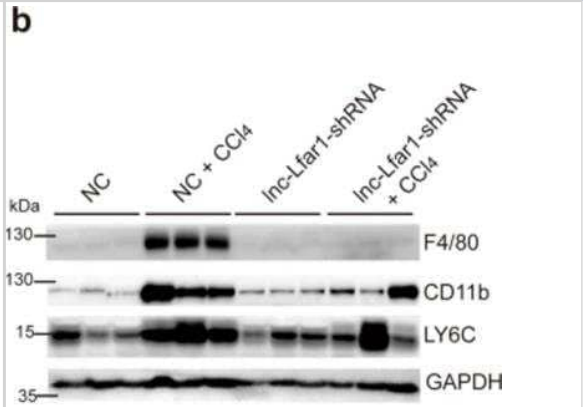
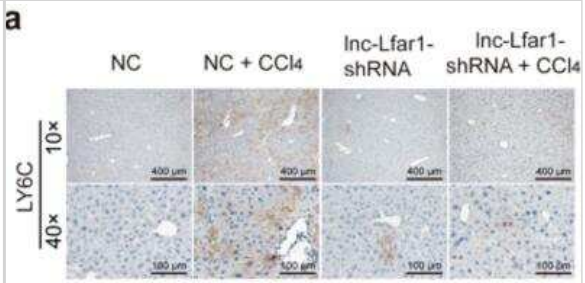
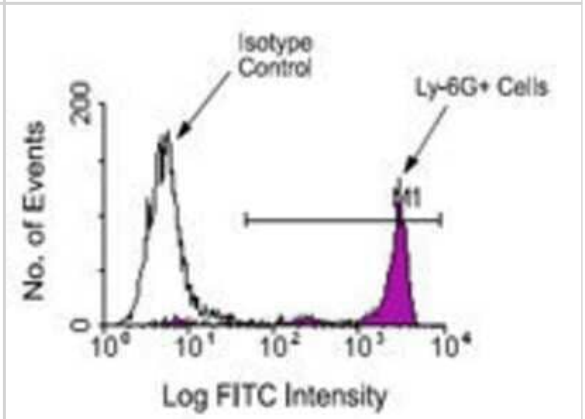
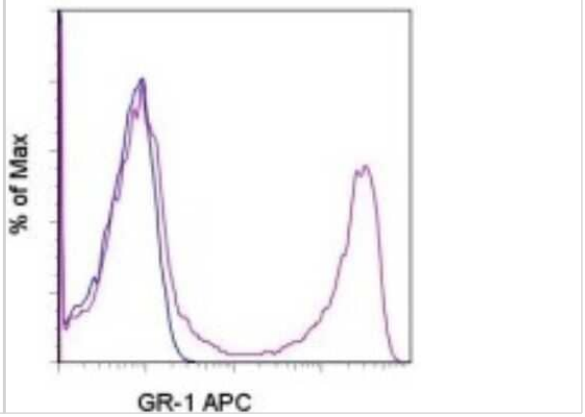
Ly-6G/Ly-6C Antibody (RB6-8C5) - BSA Free

Product Information	
Unit Size	100 ug
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	RB6-8C5
Preservative	0.02% Sodium Azide
Isotype	IgG2b Kappa
Purity	Protein A or G purified
Buffer	PBS

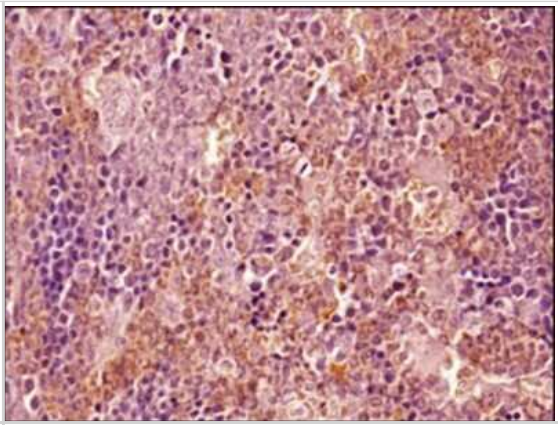
Product Description	
Description	Novus Biologicals Rat Ly-6G/Ly-6C Antibody (RB6-8C5) - BSA Free (NBP2-00441) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-Ly-6G/Ly-6C Antibody: Cited in 25 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rat
Gene ID	546644
Gene Symbol	Ly6g
Species	Human, Mouse
Reactivity Notes	Use in Mouse reported in scientific literature (PMID:34449927).
Specificity/Sensitivity	Studies indicate that in the bone marrow and lysed whole blood, the antibody clone RB6-8C5 also reacts with an additional subpopulation of Ly-6C high cells.
Immunogen	Normal mouse bone marrow.

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, In vivo assay, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot 1:100-1:2000, Flow Cytometry 1:10-1:1000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 8-25 ug/ml, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500, In vivo assay reported in scientific literature (PMID 16272176), CyTOF-ready
Application Notes	The RB6-8C5 antibody has been tested by flow cytometric analysis of mouse bone marrow cells and splenocyte suspensions. This can be used at less than or equal to 0.5 ug per test. A test is defined as the amount (ug) of antibody that will stain a cell sample in a final volume of 100 ul. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. The RB6-8C5 antibody has also been reported for use immunoprecipitation, immunoblotting (WB) and immunohistochemical staining. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest. This antibody is CyTOF ready.

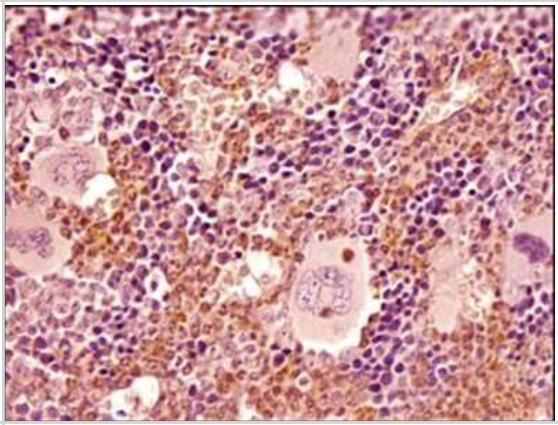
Images

Western Blot: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Mice were treated with oil in combination with injection of lenti-NC (NC, n = 10), CCl4 in combination with injection of lenti-NC (NC + CCl4, n = 10), oil in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA, n = 10), and CCl4 in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA + CCl4, n = 10). b The protein level of F4/80, CD11b and LY6C was determined by western blot. GAPDH was used as an internal control. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41419-020-2323-5), licensed under a CC-BY license.	
Immunohistochemistry: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Mice were treated with oil in combination with injection of lenti-NC (NC, n = 10), CCl4 in combination with injection of lenti-NC (NC + CCl4, n = 10), oil in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA, n = 10), and CCl4 in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA + CCl4, n = 10). a Immunohistochemistry analysis was performed to detect the expression of F4/80 and LY6C; scale bar = 400 um for 10 x and 100 um for 40x. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41419-020-2323-5), licensed under a CC-BY license.	
Flow Cytometry: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - 1 ug/1^6 BALB/c bone marrow cells were stained with either rat IgG2b: FITC (as an isotype control) or rat anti-mouse Ly-6G: FITC. Large cells were then gated and analyzed on a flow cytometer.	
Flow Cytometry: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Analysis using the Allophycocyanin conjugate of NBP2-00441. Staining of C57BL/6 bone marrow cells with 0.125 ug of Rat IgG2b kappa Isotype Control APC (blue histogram) or 0.125 ug of Anti-Mouse Ly-6G (Gr-1) APC (purple histogram).	

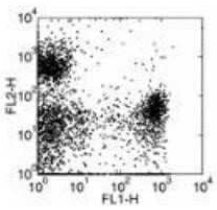
Immunohistochemistry-Paraffin: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Analysis of a FFPE tissue section of mouse bone marrow using 1:100 dilution of Lot E04586-1632 of Ly-6G antibody (clone RB6-8C5). The antibody generated specific staining in a subset of cells in the tested section.



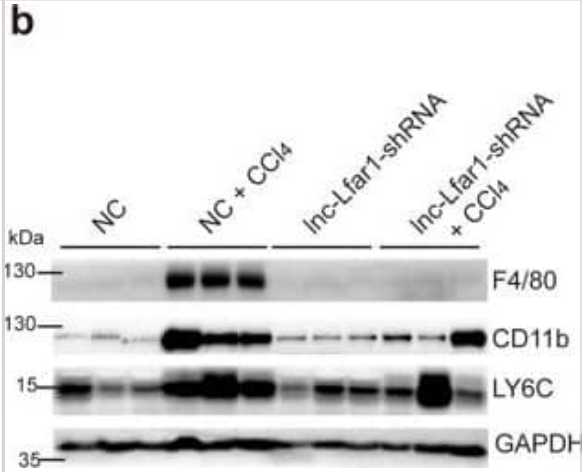
Immunohistochemistry-Paraffin: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Analysis of a FFPE tissue section of mouse bone marrow using 1:200 dilution of Lot A-1 of Ly-6G antibody (clone RB6-8C5). The antibody generated specific staining in a subset of cells in the tested section. The neutrophils (identifiable from typical nuclear morphology) showed stronger signal than the neighboring cells.



Flow Cytometry: Ly-6G/Ly-6C Antibody (RB6-8C5) [NBP2-00441] - Staining of mouse bone marrow with Anti-Mouse Ly-6G (Gr-1) FITC and Anti-Human/Mouse CD45R (B220) PE. Total viable cells were used for analysis.

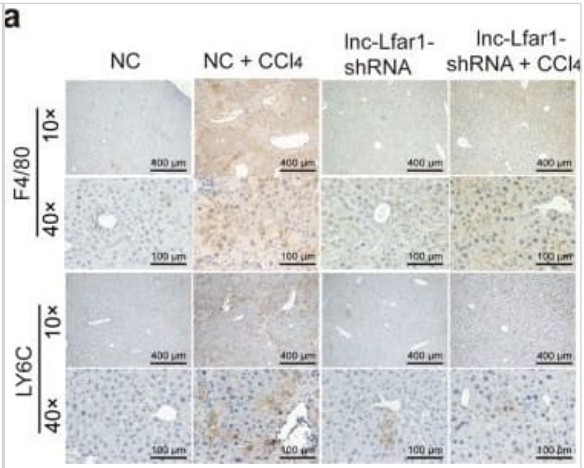


ICM and TE progenitors show loss of responsiveness to Hippo signaling manipulation at the same time as they loose responsiveness to positional changes.(A) Overview of Hippo signaling activation time course. Each bar represents 24 hr of 50 μM ROCKi treatment. (B) Percent of Cdx2 positive cells per embryo cultured for 24 hr in control or ROCKi conditions. Label on top indicates the stage embryos started treatment. n indicates number of embryos analyzed. Statistical significance was calculated using t-test and significant p-values are indicated. Error bars: s.d. of mean. (C) Strategy for inducible Hippo signaling inactivation. Mostly mosaic Dox-inducible DN Lats2-IRES-mCherry transgenic embryos were generated. Each bar represents 24 hr of Dox treatment. (D) Dox-inducible DN Lats2-IRES-mCherry transgenic embryos were imaged before Dox treatment (top panel) and the same embryo was imaged following 24 hr of Dox live (middle panel) and fixed/stained for lineage markers (bottom panel). A representative embryo is shown for each stage. Live mCherry is shown as an extended focus image, immunofluorescence stainings shown as single plane images. mCherry positive ICMs in mosaic transgenic embryos are circled with a dotted line. Arrow points to a rare ICM cell in a 64 cell stage-induced embryo with weak Cdx2 expression, which also co-expressed an ICM marker.



Scale bar: 25 μm. n indicates number of transgenic embryos analyzed. (E) All mCherry negative (non-transgenic control) and mCherry positive (DN Lats2-mCherry transgenic) ICM cells were scored in mosaic embryos for presence or absence of lineage markers following 24 hr of Dox treatment by immunofluorescence staining. Cells with different lineage marker expression are shown as percent of all mCherry negative or mCherry positive ICM cells analyzed. n(cell) indicates number of cells analyzed at each stage and n(embryo) indicates number of embryos cells were pooled from. Chi-squared test was used to test whether cell fate was affected by DN Lats2-mCherry expression. 16 cell p-value=8.48491E-18; early 32 cell p-value=5.50841E-34; late 32 cell p-value=6.32116E-35; 64 cell p-value=0.004103716; >64 cell p-value=0.588416983.DOI:https://dx.doi.org/10.7554/eLife.22906.019Effect of ROCKi treatment on cell number and Hippo signaling.(A) Total cell numbers in control and 50 μM ROCKi treated embryos at different stages. n indicates number of embryos analyzed. Statistical significance was calculated using t-test and significant p-values are indicated. Error bars: s.d. of mean. (B) Immunofourescence staining of control and 50 μM ROCKi treated embryos for TE marker (Cdx2), ICM marker (Klf4) and Yap. 24 hr treatment was started at the 16 cell stage. A total of 4 control and 4 ROCKi-treated embryos were imaged in one experiment. Scale bar: 25 μm. (C) Immunofourescence staining of control and 50 μM ROCKi treated embryos for TE marker (Cdx2), ICM marker (Klf4) and phospho-Yap (form of Yap sequestered into the cytoplasm due to active Hippo signaling). 24 hr treatment was started at the 16 cell stage. A total of 4 control and 3 ROCKi-treated embryos were imaged in one experiment. Scale bar: 25 μm.DOI:https://dx.doi.org/10.7554/eLife.22906.020Expression of mCherry only does not influence cell fate in the embryo.2 cell stage embryos were injected with H2O (wild-type control) or a cocktail of PB-TAC-mCherry-IRES-mCherry, PB-CAG-rtTA and PBase mRNA (mCherry control). Embryos were treated with Dox for 24 hours starting at the 32 or 64 cell stages. Following Dox treatment cell fate of ICM cells was analyzed by immunofluorescence staining for lineage markers. Cell fates shown as percent of all H2O injected ICM cells (in H2O injected embryos) or all mCherry positive ICM cells (in mCherry control embryos). n(cell) indicates number of cells analyzed at each stage and n(embryo) indicates number of embryos cells were pooled from. Chi-squared test was used to test whether cell fate was affected by mCherry expression. 32 cell p-value= 0.139370244, 64 cell p-value= 0.07551351.DOI:https://dx.doi.org/10.7554/eLife.22906.021 Image collected and cropped by CiteAb from the following open publication (https://elifesciences.org/articles/22906), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Immunohistochemistry: Ly-6G/Ly-6C Antibody (RB6-8C5) - BSA Free [NBP2-00441] - Silencing lnc-Lfar1 alleviates CCl4-induced proinflammatory activation of macrophages.Mice were treated with oil in combination with injection of lenti-NC (NC, n = 10), CCl4 in combination with injection of lenti-NC (NC + CCl4, n = 10), oil in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA, n = 10), & CCl4 in combination with injection of lenti-lnc-Lfar1-shRNA (lnc-Lfar1-shRNA + CCl4, n = 10). a Immunohistochemistry analysis was performed to detect the expression of F4/80 & LY6C; scale bar = 400 μm for 10 × and 100 μm for 40×. b The protein level of F4/80, CD11b & LY6C was determined by western blot. GAPDH was used as an internal control. c The mRNA level of F4/80, Ly6c, Ccr2, Cd20, Il-6, iNos, Ccl5, Cxcl5, Cxcl9 & Cxcl10 was determined by qRT-PCR. *p < 0.05 vs NC, #p < 0.05 vs NC + CCl4. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32071306), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Zhang K, Zhang MX, Meng XX et al. Targeting GPR65 alleviates hepatic inflammation and fibrosis by suppressing the JNK and NF-?B pathways Military Medical Research 2023-11-25 [PMID: 38001521] (IHC, WB, Human, Mouse)

Tang N, Gong XR, Huang H, Meng Q Activated neutrophil-derived exosomes contribute to blood-brain barrier damage and hemorrhagic transformation after cerebral ischemia/reperfusion Brain research 2023-04-26 [PMID: 37116559] (IHC, Mouse)

Spencer NR, Radnaa E, Baljinnyam T Et al. Development of a mouse model of ascending infection and preterm birth PLoS One 2021-12-02 [PMID: 34855804] (IHC-P, Mouse)

Details:
Citation using the DyLight 650 version of this antibody.

Ruhela D, Bhopale VM, Kalakonda S et al. Astrocyte-derived microparticles initiate a neuroinflammatory cycle due to carbon monoxide poisoning Brain Behav Immun Health 2021-12-01 [PMID: 34917988] (WB, FLOW, Mouse)

Details:
Citation using the PerCP format of this antibody.

Li J, Zou X, Yang S Et al. Neutrophil Extracellular Traps Participate in the Development of Gastric Cancer Associated Thrombosis Research Square 2021-07-27 [PMID: 36051331] (ICC/IF)

Zhang S, Cao Y, Du J Et al. Neutrophil extracellular traps contribute to tissue plasminogen activator resistance in acute ischemic stroke FASEB journal : official publication of the Federation of American Societies for Experimental Biology Sep 1 2021 12:00AM [PMID: 34449927] (ICC/IF, Human)

Keshava S, Magisetty J, Tucker TA et al. Endothelial Cell Protein C Receptor Deficiency Attenuates Streptococcus Pneumoniae-induced Pleural Fibrosis American journal of respiratory cell and molecular biology 2021-02-18 [PMID: 33600743]

Zhang K, Shi Z et al. Silencing lncRNA Lfar1 alleviates the classical activation and pyoptosis of macrophage in hepatic fibrosis. Cell Death Dis 2020-02-18 [PMID: 32071306] (WB, IF/IHC, Mouse)

Stremnitzer C, Manzano-Szalai K et al. Papain Degrades Tight Junction Proteins of Human Keratinocytes In Vitro and Sensitizes C57BL/6 Mice via the Skin Independent of its Enzymatic Activity or TLR4 Activation. J Invest Dermatol 2015-01-07 [PMID: 25705851] (IF/IHC, Mouse)

Kondreddy V, Pendurthi Ur, Xu X et Al. FVIIa (Factor VIIa) Induces Biased Cytoprotective Signal in Mice Through the Cleavage of PAR (Protease-Activated Receptor)-1 at Canonical Arg41 Site Arterioscler. Thromb. Vasc. Biol. 2020-03-26 [PMID: 32212848] (Mouse)

Miyabe C, Miyabe Y, Moreno L et al. Dectin-2-induced CCL2 production in tissue-resident macrophages ignites cardiac arteritis J. Clin. Invest. 2019-06-06 [PMID: 31169521] (IHC-P, Mouse)

Murase T, Yamamoto T, Koide A et al. Temporal expression of chitinase-like 3 in wounded murine skin Int. J. Legal Med. 2017-08-06 [PMID: 28780759] (IF/IHC, Mouse)

More publications at http://www.novusbio.com/NBP2-00441

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF005	Goat anti-Rat IgG Secondary Antibody [HRP]
NB7115	Goat anti-Rat IgG (H+L) Secondary Antibody [HRP]
NBP1-43323-0.5mg	Rat IgG2b Kappa Light Chain Isotype Control (149/10H5)

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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