abcam

ab25377

Anti-Ly6g + Ly6c antibody [RB6-8C5]

Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) is a rat monoclonal antibody detecting Ly6c in Flow Cytometry, IHC-P, IHC-Fr. Suitable for Mouse.

- Over 190 publications - Trusted since 2005

Ly6G and Ly6C are surface markers commonly used to identify and differentiate subsets of myeloid cells, particularly neutrophils and monocytes, in immunological studies. Their expression patterns help researchers characterize inflammatory responses, track immune cell infiltration, and study disease mechanisms in models of autoimmunity, infection, and cancer

Lab Essentials

Key facts

Isotype	IgG2b
Host species	Rat
Storage buffer	pH: 8.2 Constituents: 100% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogens	Full Length Protein corresponding to Mouse Ly6g. The exact immunogen used to generate this antibody is proprietary information. Database link P35461
Clone number	RB6-8C5
Purity	Tissue culture supernatant
Light chain type	kappa

Reactivity data

IHC-Fr

Tested

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information Ly6g

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Product Specifications

Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) is a rat Monoclonal antibody and is validated for use in Flow Cyt, IHC-Fr, IHC-P in mouse samples.
Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) specifically detects Ly6g +Ly6c (UniProt ID: P35461; Molecular weight: 9kDa) and is sold in a convenient trial size to enable initial testing (25 µg) and larger sizes for subsequent scaling up experiments (100 µg).

Quality and Validation

Abcam's high quality validation processes ensure Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) has high sensitivity and specificity.
Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) has been cited over 193 times in peer reviewed journals and is trusted by the scientific community.
Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377) has 5 independent reviews from customers.

Related Products

Antibody clone RB6-8C5 is also available pre-conjugated to a variety of labels for your convenience - PE, FITC, APC, PE/Cy7®, Biotin, redFluor™ 710, violetFluor™ 450 (ab24884, ab25024, ab25273, ab25514, ab25680, ab242065, ab253070).

This product was changed from ascites to tissue culture supernatant on 2nd March 2020. Lot numbers higher than GR3218400 are from tissue culture supernatant. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Ly6g and Ly6c also known as Ly-6G and Ly6G marker are glycosylphosphatidylinositol (GPI)-anchored cell surface proteins found primarily in the immune system. They participate in neutrophil surface differentiation with approximately 25-35 kDa being the mass of Ly6g. These targets are expressed mostly on neutrophils making them useful markers for identifying and isolating these immune cells. Researchers often use '8c5' and 'anti-Ly6g' antibodies for staining Ly6g along with Ly6c to study immune cell populations particularly in inflammatory responses.
Biological function summary	Ly6g and Ly6c facilitate the identification and migration of neutrophils to inflammation and infection sites. They are not considered part of a larger complex but play an important role in immune surveillance. They contribute to the immune system’s ability to target and respond to pathogens as Ly6g assists in the recruitment and activation of these immune cells. The modulation of these proteins can affect immune cell trafficking and tissue injury.

Pathways	The surface proteins Ly6g and Ly6c are heavily involved in innate immune response pathways and leukocyte transendothelial migration. Their expression and activity can alter the immune response and inflammation rates which is why their presence indicates active participation in immune response pathways. These markers also connect with other proteins involved in cell adhesion such as integrins highlighting their role in cellular interactions during immune responses.
Associated diseases and disorders	Ly6g and Ly6c have implications in inflammatory diseases and certain cancers. Their expression levels may link to diseases like rheumatoid arthritis where they impact inflammatory cell migration. In cancer elevated levels of these proteins can associate with tumor-associated neutrophils which might influence tumor progression. Researchers use these markers often alongside other proteins like Gr-1 to explore the role of immune cells in these pathological conditions and potential therapeutic targets.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

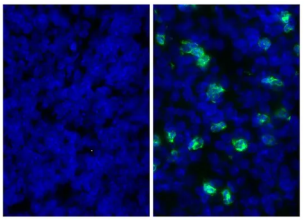
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

2 product images



Immunohistochemistry (Frozen sections) - Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377)

Ly6g + Ly6c Immunohistochemistry (Frozen sections) staining using rat Anti-Ly6g + Ly6c antibody

Immunohistochemistry (Frozen sections) analysis of Mouse frozen spleen tissue labeling Ly6g with ab25377. Right: Rat Anti-Mouse Ly-6G-UNLB followed by Mouse Anti-Rat IgG2b-FITC. Left: Isotype Control, Rat IgG2b-UNLB followed by Mouse Anti-Rat IgG2b-FITC. Blue - DAPI.
This image was generated using the ascites version of the product.

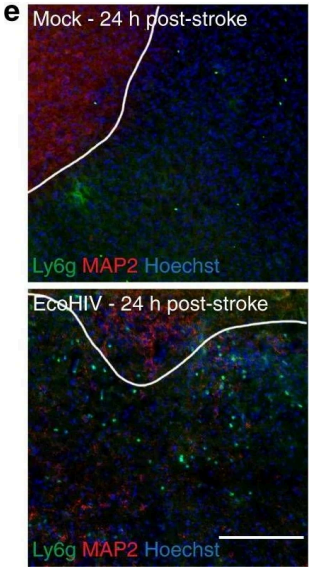


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Immunohistochemistry - Anti-Ly6g + Ly6c antibody [RB6-8C5] (ab25377)

Ly6g + Ly6c Immunohistochemistry staining using rat Anti-Ly6g + Ly6c antibody

Immunohistochemistry-immunofluorescence using Anti-Ly6g + Ly6c antibody [RB6-8C5], ab25377. Publication image from Bertrand, L. et al., 2019, Nat Commun, 31043599. Legend direct from paper.

EcoHIV diminishes post-ischemic stroke NVU recovery. Mice were infected with EcoHIV and subjected to stroke as in Fig. 1. Brain sections were stained for laminin (a), ICAM-1 (b) and P-selectin (c) 24 h post stroke, and quantified for mean fluorescence index (MFI); n = 6 mice per group, 10 microvessels per mice, 2 independent experiments. d Time course of ICAM1 expression levels as quantified by western blotting in sham and ischemic stroke animals at days 1, 4, 7, and 14 post-stroke both in mock (M) and EcoHIV-infected (E) mice. Representative blots are shown, and quantified results from 5–12 samples per group are illustrated on the bar graphs. e Representative image (left) and quantified results (right) of infiltration of the infarct area by Lys6g immunoreactive cells (neutrophils) at 24 h post-ischemic stroke. The sections were also stained for MAP2 (neurons) and Hoechst (nuclei). Absence of MAP2 staining indicates infarct area. Data quantified from 6 mice per group, 2 independent experiments, 4 fields of view per mice at x20 magnification; Z stack images. Whiskers-box plots represent centerline median, with interquartile range and min-max whiskers. Source data are provided as a Source Data file. **p < 0.01; ***p < 0.001; unpaired t test. a–c Scale bars: 40 µm; e scale bar: 320 µm

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.