abcam

ab303467

Alexa Fluor® 647 Anti-Ly6g antibody [EPR22909-135]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22909-135
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Target data

See full target information Ly6g

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
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, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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Supplementary info

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

Activity summary	Ly6G also known as lymphocyte antigen 6 complex locus G6D 1A8 or 8C5 is a glycosylphosphatidylinositol (GPI)-anchored cell surface protein. The molecule has a molecular weight of about 25-30 kDa. Its expression is mainly on neutrophils and a subpopulation of eosinophils in mice. It plays a role in the innate immune system marking these immune cells for differentiation and response to infection. Researchers consider it a specific marker for detecting and isolating mouse neutrophils often using methods such as Ly6G staining or anti-Ly6G antibodies for identification.
Biological function summary	Ly6G functions in the immune response by facilitating the migration and adhesion of neutrophils to the site of infection or injury. It is part of a protein complex on the cell surface that includes other Ly6 proteins. This group of proteins helps to modulate signal transduction for immune cell functions. Ly6G serves as an anchor through its GPI linkage aiding cell-to-cell communication and signal amplification in inflammation processes.
Pathways	Ly6G is significantly integrated into the immune signaling pathways notably the toll-like receptor (TLR) signaling pathway. Through these pathways Ly6G influences neutrophil migration and activation. Closely associated proteins include CD11b and CD18 which interact with Ly6G in neutrophil functions including adhesion and transmigration. These pathways are essential for orchestrating the body's defense mechanisms against pathogens.
Associated diseases and disorders	Ly6G plays an essential role in inflammatory conditions and autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus. Aberrant expression or function of Ly6G can alter neutrophil behavior which contributes to disease pathology. Researchers are investigating the relationship between Ly6G and other immune-related proteins like myeloperoxidase (MPO) and elastase as

these protein interactions may impact the development and progression of inflammatory diseases.

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

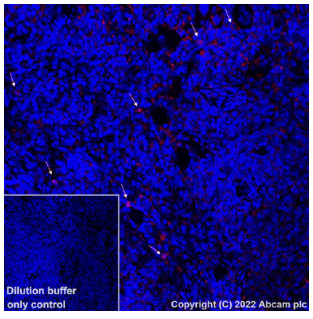
We do not recommend this combination. It is not covered by our product promise.

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.

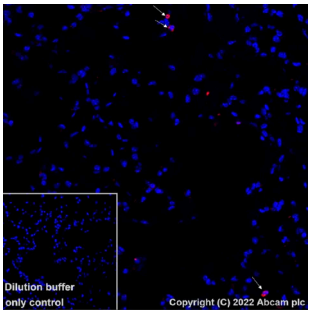
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 647 Anti-Ly6g antibody [EPR22909-135] (ab303467)

Ly6g Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Ly6g antibody

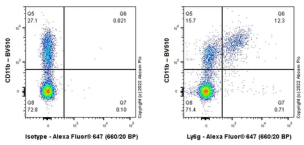
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue stained for Ly6g using ab303467 at a 1/50 dilution (10.0 µg/ml) (Red). Positive staining on scattered neutrophil-like cells (arrows) in mouse spleen. The section was incubated with ab303467 for 60 mins at room temperature (shown in red). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 40 mins).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 647 Anti-Ly6g antibody [EPR22909-135] (ab303467)

Ly6g Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Ly6g antibody

Immunohistochemical analysis of paraffin-embedded mouse lung tissue stained for Ly6g using ab303467 at a 1/50 dilution (10.0 µg/ml) (Red). Positive staining on scattered cells (arrows) in mouse lung. The section was incubated with ab303467 for 60 mins at room temperature (shown in red). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 40 mins).



Flow Cytometry - Alexa Fluor® 647 Anti-Ly6g antibody [EPR22909-135] (ab303467)

Ly6g Flow Cytometry staining using rabbit Anti-Ly6g antibody

Flow Cytometry analysis of mouse blood cells (Right panel) compared to Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 647) (ab199093) (Left panel) using ab303467 at a 1/50 dilution (1µg). Cells were stained with rabbit IgG or ab303467. Then stained with anti-CD11b conjugated to BV510. Gated on viable cells.

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