abcam

ab210204

Anti-Ly6g antibody [1A8] - Low endotoxin, Azide free

Anti-Ly6g antibody [1A8] - Low endotoxin, Azide free (ab210204) is a rat monoclonal antibody provided in an azide free buffer detecting Ly6g in **Flow Cytometry, IP, IHC-P, IHC-Fr, FuncS**. Suitable for **Mouse**.

- Suitable for in vitro and in vivo studies
- Over 10 publications

Key facts

Isotype	IgG2a
Host species	Rat
Storage buffer	pH: 7.2 Constituents: 0.87% Sodium chloride, 0.12% Sodium dihydrogen phosphate
Form	Liquid
Clonality	Monoclonal
Carrier free	Yes
Clone number	1A8
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab210204 was purified from tissue culture supernatant via affinity chromatography.

Reactivity data

IP

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	-

IHC-P

Expected

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

FuncS (Depl)

Tested

Species	Mouse
Dilution info	-
Notes	-

IHC-Fr

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 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

Notes

What is this antibody validated in?
Anti-Ly6g antibody [1A8] - Low endotoxin, Azide free (ab210204) is a rat monoclonal antibody and is validated for use in Flow Cytometry (Flow Cyt), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Functional Studies in Mouse samples.

Trusted by the scientific community
Anti-Ly6g [1A8] - Low endotoxin, Azide free (ab210204) was first used in a scientific publication in 2016 and has been cited over 10 times in peer-reviewed journals.

Other related products
We have a range of other formats of antibody clone [1A8] also available for your convenience: ab210206, ab210207, violetFluor™ 450 - ab242074, Carrier free - ab320707, Carrier free - ab320708

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

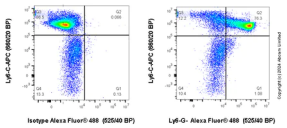
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



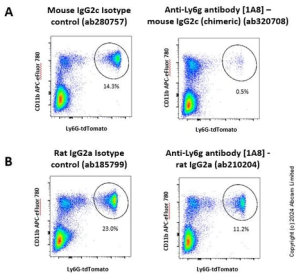
Flow Cytometry - Anti-Ly6g antibody [1A8] - Low endotoxin, Azide free (ab210204)

Ly6g Flow Cytometry staining of Mouse bone marrow cells using rat Anti-Ly6g antibody

Flow cytometry staining of C57 BL/6 mouse bone marrow cells with ab320706 (right) or Rat IgG2a, kappa monoclonal (ab18450), isotype control (left). Cells were incubated for 30 min on ice in 1x PBS containing 10% mouse serum and 10 % normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody ab320706 or Rat IgG2a, kappa monoclonal (ab18450), isotype control (1x 106 in 100 µl at 1.0 µg/ml) for 30min on ice. The cells were simultaneously stained with APC anti-mouse Ly-6C Antibody.

The secondary antibody Goat Anti-Rat IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice.

Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on live cells.



Functional Studies (Depl) - Anti-Ly6g antibody [1A8] - Low endotoxin, Azide free (ab210204)

Flow cytometric analysis of peripheral blood samples from neutrophil Ly6G-Tomato reporter mice 48h post intraperitoneal injection with 500µg of anti-Ly6G [1A8] antibody mouse IgG2c (chimeric) (ab320708) (A) or Anti-Ly6g [1A8] antibody – rat IgG2a (ab210204) (B) and corresponding isotype controls.
ab320708 injections result in prolonged neutrophils depletion compared to ab210204.

Cells were stained with CD45 conjugated to PE-Cy7 and CD11b conjugated to APC- eFluor 780. Gated on viable CD45+ population for analysis of CD11+ Ly6G-tdTomato+ neutrophils.

Developed in collaboration with Tatyana Chtanova lab, Garvan Institute of Medical Research and UNSW Sydney, Australia.

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