Leinco Technologies, Inc.
excellence in early discovery research™

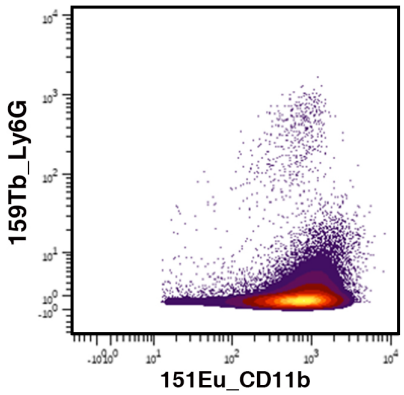
Mouse Ly-6G

Purified in vivo PLATINUM™ Functional Grade

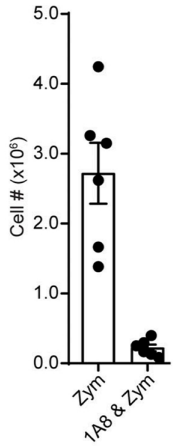
Monoclonal Antibody

Product Information

Product No.: L305
Clone: 1A8
RRID: AB_2893099
Isotype: Rat IgG2a
Storage: 2 to 8°C



CyTOF™ Data: Staining of Murine MCA Sarcoma was stained after using a metal conjugation kit to clone 1a8, Anti-Mouse Ly6G above.



Product Description

Specificity:
Clone 1A8 recognizes an epitope on mouse Ly6G. Clone 1A8 does not cross react with Ly6C.

Antigen Distribution:
Ly6G is expressed by neutrophils.

Background:
Ly6G antibody, clone 1A8, recognizes lymphocyte antigen 6 complex locus G6D (Ly6G; also called Gr-1), a 21-25 kDa glycosylphosphatidylinositol (GPI)-anchored protein[1]. Ly6G belongs to the lymphocyte antigen-6 (Ly6)/urokinase-type plasminogen activator receptor (uPAR) superfamily, characterized by a Ly6/uPAR (LU) domain-containing a three-fingered structural motif stabilized by disulfide bonds[2]. Ly6G is expressed by murine neutrophils regardless of location and activation[1,4,5]. Eosinophils may also express low levels of Ly6G[5]. There is no human ortholog for Ly6G; however, a structurally related L76/uPAR protein, CD177 (also known as HNA-2a, NB1, or PRV-1) is expressed in human neutrophils and is implicated in neutropenia[6]. Although the exact function and ligand of Ly6G remain unknown, Ly6G ligation may impair neutrophil migration to sites of inflammation via a β2-integrin-dependent mechanism[7].

Known Reactivity Species:
Mouse

Immunogen:
Ly-6G transfected EL-4J cell line.

Formulation

This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥98% monomer by analytical SEC, >95% by SDS Page

Products are for research use only. Not for use in diagnostic or therapeutic procedures.
410 Axminister Dr, St. Louis, MO 63026 (800) 538-1145 leincoglobal@leinco.com

Endotoxin
<0.5 EU/mg as determined by the LAL method

Storage and Stability
Functional grade preclinical antibodies may be stored sterile as received at 2 to 8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C.

Avoid Repeated Freeze Thaw Cycles

Product Preparation
Functional grade preclinical antibodies are manufactured in an animal free facility using in vitro cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing
To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's Purified Functional PLATINUM™ antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications
Applications and Recommended Usage (Quality Tested by Leinco):

FC The suggested concentration for this 1A8 antibody for staining cells in flow cytometry is ≤ 0.25 µg per 10^6 cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.

Other Applications Reported in Literature:
CyTOF®
Depletion
IHC FF
WB

Country of Origin
USA

References

1) Fleming TJ, at al. (1993) J Immunol. 151(5):2399-408
2) Tsetlin VI. (2015) Trends Pharmacol Sci. 36(2):109-23
3) Daley JM, et al. (2008) J Leukoc Biol. 83(1):64-70
4) Lee PY, et al. (2013) J Leukoc Biol. 94(4):585-594
5) Percopo CM, et al. (2017) J Leukoc Biol. 101(1):321-328.
6) Stroncek DF. (2007) Curr Opin Hematol. 14(6):688-93
7) Wang JX, et al. (2012) Blood. 120(7):1489-1498
8) Tzetzo, S. L., Kramer, E. D., Mohammadpour, H., Kim, M., Rosario, S. R., Yu, H., Dolan, M., Oturkar, C. C., Morreale, B., Bogner, P. N., Stablewski, A., Benavides, F., Brackett, C. M., Ebos, J. M., Das, G. M., Opyrchal, M., Nemeth, M. J., Evans, S. S., & Abrams, S. I. (2024). Downregulation of IRF8 in alveolar macrophages by G-CSF promotes metastatic tumor progression. iScience, 109187.