

Anti-Ly6G [1A8] Vivopure 10 mg Ab00295-2.3-VPT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a murinised antibody to reduce immunogenicity in vivo and was created using our proprietary Fc Silent™ engineered Fc domain, containing key point mutations that abrogate binding of Fc Receptor and complement.

Isotype and Format: Mouse IgG2a, Fc Silent[™], Kappa

Clone Number: 1A8

Alternative Name(s) of Target: LGR-1; y-6G; GR1; Lymphocyte antigen 6G

UniProt Accession Number of Target Protein: P35461

Published Application(s): Depletion, FC Published Species Reactivity: Mouse

Immunogen: LEW/N rats immunized with 1.5x10E8 Ly-6G-transfected EL4J cells

Specificity: Recognises the murine GPI-anchored protein Ly6G, a marker of granulocyte differentiation, maturation and, together with Ly6C, a component of the Granulocyte Receptor-1 Antigen (Gr-1). Unlike another commonly used clone, RB6-8C5, 1A8 does not bind Ly6C.

Application Notes: Neutrophils are crucial components of our immune system. Ly6G is highly expressed on neutrophils, which allows the 1A8 clone to be used not only in detection of neutrophils, but also in selective depletion *in vivo*. It may also be used as a negative selection marker for bone-marrow derived macrophages, which should be Ly6G(-) and F4/80 (+) (see our F4/80 range of antibodies). The mouse IgG2a version of the antibody, recombinantly produced by Absolute Antibody, could deplete neutrophils in mice more efficiently than the rat version of the antibody. Further, this version increased depleting effector function, and prevented the production of anti-rat antibodies (Olofsen et al., 2022; PMID: 36359801).

Antibody First Published in: Fleming TJ, Fleming ML, Malek TR. Selective expression of Ly-6G on myeloid lineage cells in mouse bone marrow. RB6-8C5 mAb to granulocyte-differentiation antigen (Gr-1) detects members of the Ly-6 family. Journal of Immunology PMID:8360469

Note on publication: Describes production of 1A8 and identification of Ly6G as its target.

Product Form

Size: 10 mg Vivopure products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are

formulated without preservatives. As a result Vivopure products are the ideal choice for in vivo research applications.

Purification: Protein A affinity purified

Supplied In: PBS only, with >98% antibody purity and <1 EU/mg guaranteed.

Storage Recommendation: All vivopure products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions.

Concentration: >=1mg (see vial label for exact conc)

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.