Mouse Ly-6G Antibody

DyLight® 488

Monoclonal A	Antibody
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Product Information

Product No.:	L287
Clone:	1A8
RRID:	AB_2810281
Isotype:	Rat IgG2a
Storage:	Sterile 2 to 8°C

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 protein¹. 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 bonds². Ly6G is expressed by murine neutrophils regardless of location and activation^{1,4,5}. Eosinophils may also express low levels of Ly6G⁵. 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 neutropenia⁶. Although the exact function and ligand of Ly6G remain unknown, Ly6G ligation may impair neutrophil migration to sites of inflammation via a β 2-integrin-dependent mechanism⁷.

Known Reactivity Species:

Mouse

Format:

DyLight® 488

Immunogen:

Purified Recombinant Mouse Ly-6G (>98%)

Formulation

This DyLight® 488 conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.

Storage and Stability

This DyLight® 488 conjugate is stable when stored at 2 to 8°C. Do not freeze.

Country of Origin

USA

References

- 1) Fleming TJ, et al. (1993) J Immunol. 151(5):2399-408
- 2) Tsetlin VI. et al. (2015) Trends Pharmacol Sci. 36(2):109-23
- 3) Daley JM, et al. (2008) J Leukoc Biol. 83(1):64-70





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Fluorescence profiles of C57/BL6 splenocytes gated on granulocytes unstained (blue histogram) or stained with Ly-6g-DyLight 488 (red histogram).