

# Anti-Mouse Ly-6G BG Violet 500

Catalog Number :83112-45 RUO: For Research Use Only. Not for use in diagnostic procedures.

## **Product Information**

Clone: 1A8
Format/Conjugate: BG Violet 500
Concentration: 0.2 mg/mL
Reactivity: Mouse
Laser: Violet (405nm)
Peak Emission: Not Applicable
Peak Excitation: Not Applicable
Filter: Not Applicable
Brightness (1=dim,5=brightest): Not Applicable
Isotype: Rat IgG2a, kappa
Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.
Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.
Applications: FC

#### Description

The 1A8 monoclonal antibody specifically reacts with the 21-25 kDa glycophosphatidylinositol-anchored protein known as Ly-6G, expressed by the granulocytes from the bone marrow and periphery neutrophils. Ly-6G and Ly-6C form the Granulocyte Receptor-1 antigen (GR-1).

The binding of the 1A8 antibody to the Ly-6G can be blocked by another antibody, RB6-8C5, which also recognizes Ly-6C. While 1A8 is specific for only Ly-6G, RB6-8C5 also binds to Ly-6C.

BG Violet 500 conjugate is an alternative to the Pacific Orange and BD Horizon V500 dyes. It is excited by the violet (405 nm) laser, with a peak emission of 500nm.

## **Preparation & Storage**

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

## **Application Notes**

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.125$  ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

#### References

1.Fleming, T. J., Fleming, M. L., Malek, T. R. (1993). 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. The Journal of Immunology, 151(5), 2399-2408.

2. Daley, J. M., Thomay, A. A., Connolly, M. D., Reichner, J. S., Albina, J. E. (2008). Use of Ly6G-specific monoclonal antibody to deplete neutrophils in mice.; Journal of leukocyte biology,; 83(1), 64-70.

3. Dietlin, T. A., Hofman, F. M., Lund, B. T., Gilmore, W., Stohlman, S. A., van der Veen, R. C. (2007). Mycobacteria-induced Gr-1+ subsets from

 $distinct\ myeloid\ lineages\ have\ opposite\ effects\ on\ T\ cell\ expansion.; Journal\ of\ leukocyte\ biology,; 81(5),\ 1205-1212.$