Technical Data Sheet

PE-CF594 Rat Anti-Mouse Ly-6G

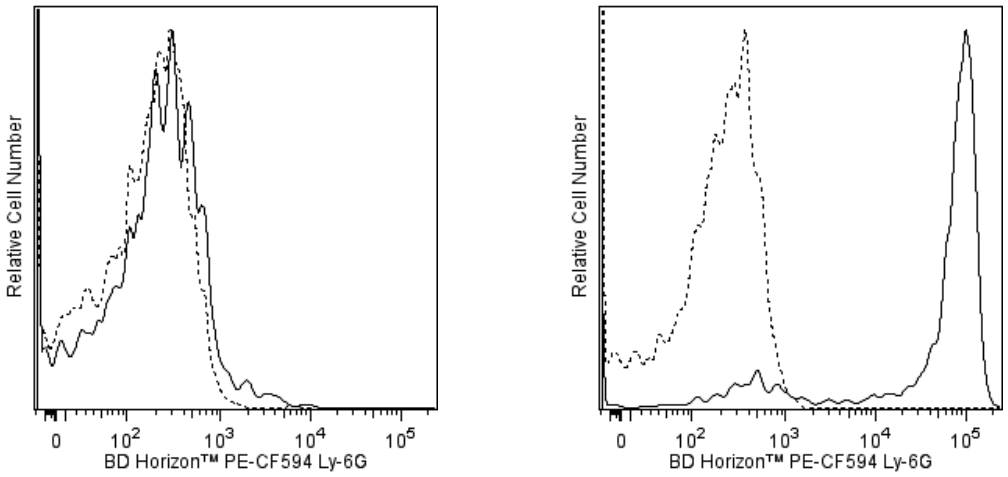
Product Information

Material Number:	**562700**
Alternate Name:	Ly6g; Lymphocyte antigen 6G; Lymphocyte antigen 6 complex, locus G; Gr1
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	1A8
Immunogen:	Ly-6G-transfected EL4J cell line
Isotype:	Rat (LEW) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 1A8 antibody reacts with Ly-6G, a 21-25-kDa GPI-anchored protein. In the bone marrow, Ly-6G is expressed on the majority of the largest cells, which are predominantly granulocytes, and not on lymphoid or erythroid cells. In the periphery, it is expressed on granulocytes. The mAb RB6-8C5 (Cat. No. 557445/553123) recognizes both Ly-6G and Ly-6C and blocks the binding of mAb 1A8 to Ly-6G.

This antibody is conjugated to BD Horizon™ PE-CF594, which has been developed exclusively by BD Biosciences as a better alternative to PE-Texas Red®. PE-CF594 excites and emits at similar wavelengths to PE-Texas Red® yet exhibits improved brightness and spectral characteristics. Due to PE having maximal absorption peaks at 496 nm and 564 nm, PE-CF594 can be excited by the blue (488-nm), green (532-nm) and yellow-green (561-nm) lasers and can be detected with the same filter set as PE-Texas Red® (eg 610/20-nm filter).



Flow cytometric analysis of Ly-6G expression on mouse bone-marrow leukocytes. *A BALB/c bone-marrow cell suspension was stained with either BD Horizon™ PE-CF594 Rat Anti-Mouse Ly-6G antibody (Cat. No. 562700; solid line histogram) or BD Horizon™ PE-CF594 Rat IgG2a, κ Isotype Control (Cat. No. 562302; dashed line histogram). Flow cytometric histograms were derived from gated events based on the light scattering characteristics of viable lymphoid (Left Panel) or myeloid (Right Panel) cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometry System.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The antibody was conjugated with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone
562302	PE-CF594 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
9. CF™ is a trademark of Biotium, Inc.
10. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
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12. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using multi-laser cytometers, which may directly excite both PE and CF™594.

References

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. *J Immunol.* 1993; 151(5):2399-2408. (Immunogen: Flow cytometry, Immunoprecipitation)
Fleming TJ, Malek TR. Multiple glycosylphosphatidylinositol-anchored Ly-6 molecules and transmembrane Ly-6E mediate inhibition of IL-2 production. *J Immunol.* 1994; 153(5):1955-1962. (Biology)

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