Technical Data Sheet

PE-CF594 Rat Anti-Mouse IgG1

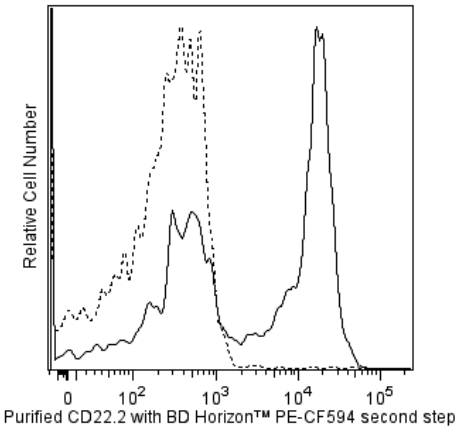
Product Information

Material Number:	**562559**
Alternate Name:	Ighg1; Immunoglobulin heavy constant gamma 1; Igh-4
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	A85-1
Immunogen:	Pooled Mouse IgG1
Isotype:	Rat (LOU) IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The A85-1 antibody reacts specifically with mouse IgG1 of Igh-Ca and Igh-Cb haplotypes. It does not react with other Ig isotypes. Detection of surface immunoglobulin on B lymphoma cells has been demonstrated with the A85-1 monoclonal antibody. A suspension of pooled mouse IgG1 was used as the source of immunogen.

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 CD22.2 expression on mouse splenocytes using BD Horizon™ PE-CF594 Rat Anti-Mouse IgG1 second step. *BALB/c mouse splenocytes were stained with either purified Mouse Anti-Mouse CD22.2 antibody (Clone Cy34.1, solid line histogram) or with no antibody (dashed line histogram). After washing the cells were stained with BD Horizon™ PE-CF594 Rat Anti-Mouse IgG1 (Cat. No. 562559) as the second step. The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable splenocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
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.

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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

Bhattacharya D, Lee DU, Sha WC. Regulation of Ig class switch recombination by NF-kappaB: retroviral expression of RelB in activated B cells inhibits switching to IgG1, but not to IgE. *Int Immunol.* 2002; 14(9):983-991. (Clone-specific: Flow cytometry)

Honjo T, Obata M, Yamawaki-Katoaka Y, et al. Cloning and complete nucleotide sequence of mouse immunoglobulin gamma 1 chain gene. *Cell.* 1979; 18(2):559-568. (Biology)

Ozaki K, Spolski R, Ettinger R, et al. Regulation of B cell differentiation and plasma cell generation by IL-21, a novel inducer of Blimp-1 and Bcl-6. *J Immunol.* 2004; 173(9):5361-5371. (Clone-specific: Flow cytometry)