

Technical Data Sheet

PE-CF594 Rat Anti-Mouse Ig, κ Light Chain

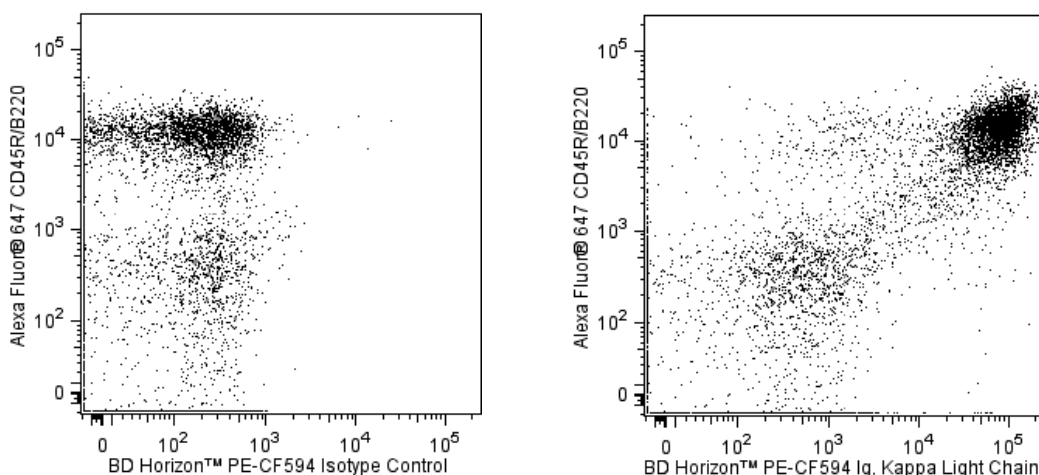
Product Information

Material Number:	562476
Alternate Name:	Ig kappa chain C region; IGKC; Igk-C; Ig, κ
Size:	50 μ g
Concentration:	0.2 mg/ml
Clone:	187.1
Immunogen:	Mouse IgG2b κ secreted by MPC-11 plasmacytoma
Isotype:	Rat (SD) IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.

Description

The 187.1 monoclonal antibody specifically binds to kappa light chains of mouse immunoglobulins. The 187.1 antibody does not react with mouse $\lambda 1$ or $\lambda 2$ immunoglobulin lights chains or mouse immunoglobulin heavy chains.

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).



Multicolor flow cytometric analysis of mouse immunoglobulin κ light chain expression on mouse splenocytes. Splenocytes from BALB/c mice were stained with Alexa Fluor® 647 Rat Anti-Mouse CD45R/B220 (Cat. No. 557683) and with either a BD Horizon™ PE-CF594 Rat IgG1, κ Isotype Control (Cat. No. 562309, Left Panel) or with the BD Horizon™ PE-CF594 Rat Anti-Mouse Ig, κ Light Chain antibody (Cat. No. 562476, Right Panel). Two-color flow cytometric dot plots showing the correlated expression of Ig, κ light chain (or Ig isotype control staining) versus CD45R/B220 were derived from gated events with the light scattering characteristics of viable splenocytes. 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
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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
562309	PE-CF594 Rat IgG1, κ Isotype Control	0.1 mg	R3-34
554656	Stain Buffer (FBS)	500 ml	(none)
557683	Alexa Fluor® 647 Rat Anti-Mouse CD45R	0.1 mg	RA3-6B2

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 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.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
8. CF™ is a trademark of Biotium, Inc.
9. 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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11. 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.
12. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

Yelton DE, Desaynard C, Scharff MD. Use of monoclonal anti-mouse immunoglobulin to detect mouse antibodies. *Hybridoma*. 1981; 1(1):5-11. (Immunogen)

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