Technical Data Sheet

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

Product Information

Material Number: 562620

Alternate Name: Ig, kappa Light Chain; IGKC; HCAK1; Km; Ig kappa chain C region

Entrez Gene ID: 3514

Size: 50 tests

Vol. per Test: 5 μ l

Clone: G20-193

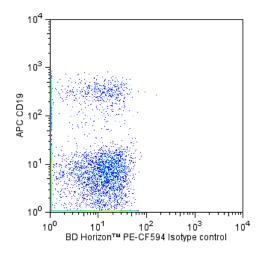
Isotype: Mouse IgG1, κ Reactivity: QC Testing: Human

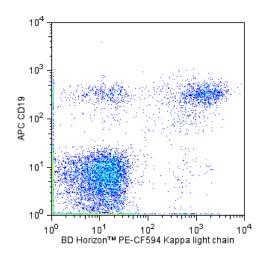
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The G20-193 monoclonal antibody specifically binds to human immunoglobulin light chain, kappa (κ). It does not react with human immunoglobulin λ light chains or human immunoglobulin heavy chains.

This antibody is conjugated to BD HorizonTM 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 $\lg \kappa$ Light Chain expression on human peripheral blood lymphocytes. Human peripheral blood mononuclear cells (PBMC) were incubated in complete tissue culture medium overnight in order to minimize subsequent nonspecific immunofluorescent staining. The cells were harvested and stained with APC Mouse Anti-Human CD19 antibody (Cat. No. 555415/561742) and either BD Horizon PE-CF594 Mouse $\lg G_1$, κ Isotype Control (Cat. No. 562292; Left Panel) or BD Horizon PE-CF594 Mouse Anti-Human $\lg \kappa$ Light Chain antibody (Cat. No. 562620; Right Panel). The two-color flow cytometric dot plots showing the correlated expression of $\lg \kappa$ Light Chain (or \lg isotype control staining) versus CD19 were derived from events with the forward and side $\lVert \lg h \rVert$ -scatter characteristics of viable $\lVert \lg h \rVert$ -scatter cytometry was performed using a $\lVert B \rVert$ - $\lVert K \rVert$ I 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

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone	
562292	PE-CF594 Mouse IgG1, κ Isotype Control	0.1 mg	X40	
554656	Stain Buffer (FBS)	500 ml	(none)	
555415	APC Mouse Anti-Human CD19	100 tests	HIB19	
561742	APC Mouse Anti-Human CD19	25 tests	HIB19	

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
- An isotype control should be used at the same concentration as the antibody of interest.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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.
- 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.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at 7. www.bdbiosciences.com/colors.
- Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- CFTM 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 CFTM594.

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Page 2 of 2 562620 Rev. 1